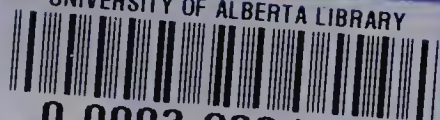


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# Canada's Nearest Neighbor: The United States



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CANADA'S NEAREST  
NEIGHBOR

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THE  
UNITED STATES

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# CANADA'S NEAREST NEIGHBOR

# THE UNITED STATES

GERTRUDE STEPHENS BROWN  
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CHRISTOPHER S. MILLIGAN  
DAVID C. SMITH  
EDNA BAKKEN  
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GINN AND COMPANY/EDUCATIONAL PUBLISHERS

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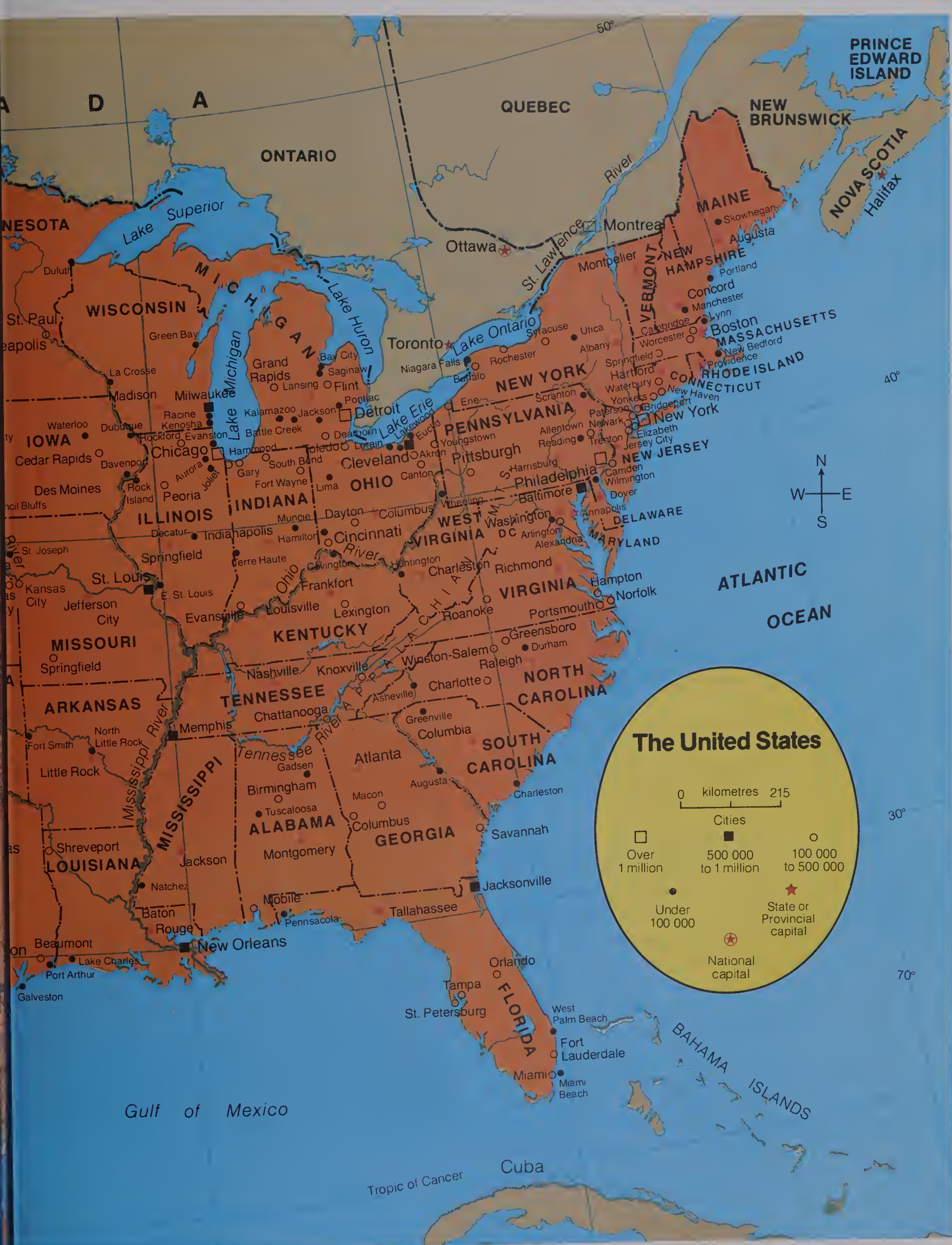
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## Geography of the United States

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# The United States

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## **A Huge and Varied Land**

The United States reaches from the Atlantic Ocean on the east to the Pacific Ocean on the west. It reaches from Canada on the north to Mexico on the south.

The far-distant states of Alaska and Hawaii are part of this country. Alaska is the northern-most state. Hawaii is a group of islands far out in the Pacific Ocean.

**The United States has many different kinds of land.** There are wide plains, fertile valleys, and rolling hills. There are high plateaus and ranges of mountains. If you travelled along the red line on the map on pages 14-15, you would see the many different kinds of land found in the United States.

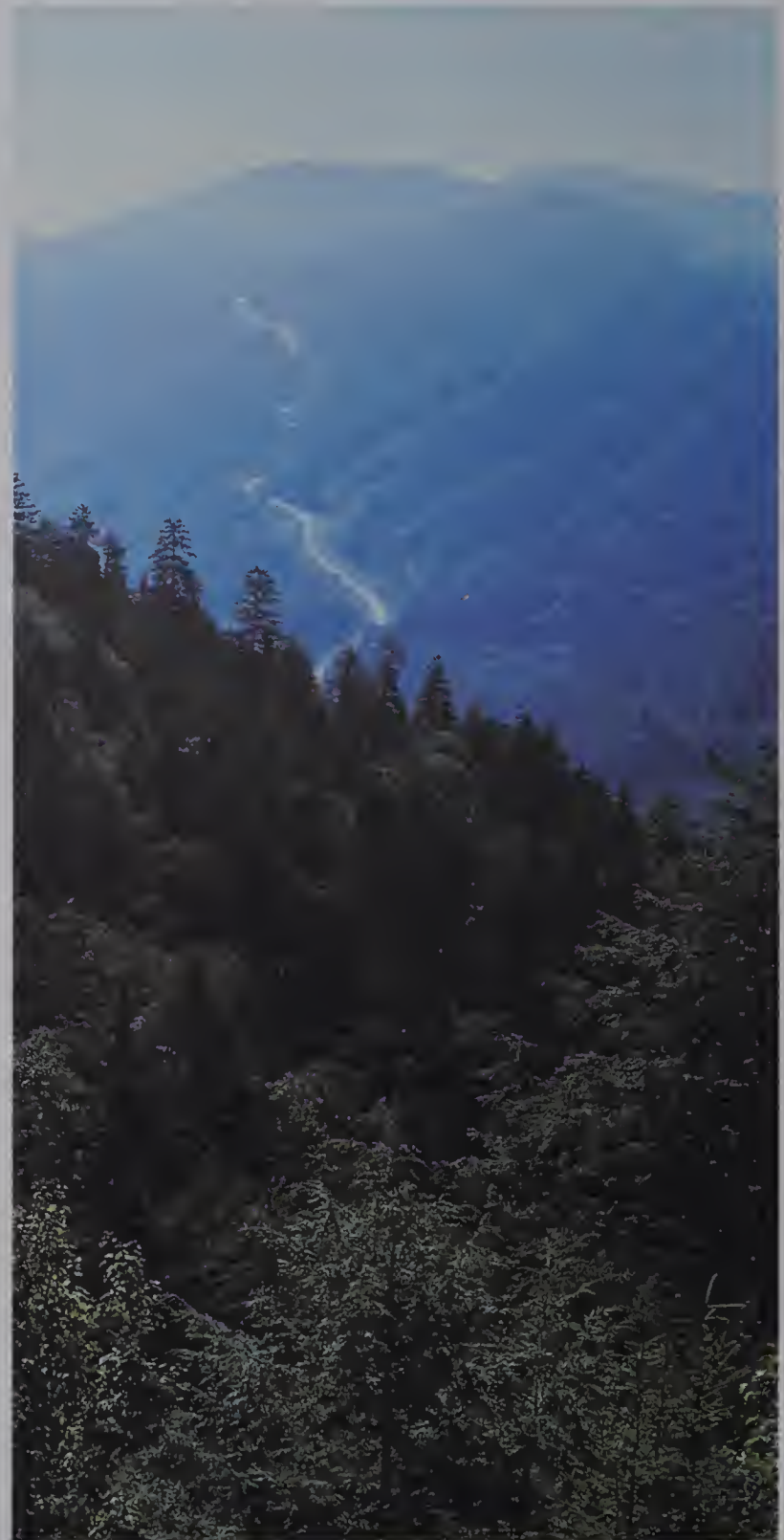
**The United States has both high lands and low lands.** The mountain peaks are the highest lands. One of the tallest mountains is Pikes Peak. Pikes Peak is in the Rocky Mountains. The altitude of Pikes Peak is 4300 m. *Altitude* is the height of land above the level of the sea. Another word for altitude is *elevation*. Mount McKinley, in Alaska, is much higher than Pikes Peak. It has an altitude of 6187 m. Mount McKinley is the highest point in the United States. Mount Logan, the highest point in Canada, is 6050 m.

**Large areas of the United States are plains.** *Plains* are mostly level lands. Plains usually make good farmlands. Most plains are fertile. They can produce large amounts of food. It is easier to build roads and railroads on plains than over mountains.

**Some parts of the United States are plateaus.** A *plateau* is a broad, high area of land. It may be partly flat and partly hilly. It may have steep slopes on one or more sides. Plateaus in the western part of the United States are often very dry.

**Hills extend through many parts of the United States.** *Hills* are rolling lands that are not as high as mountains. Hills are often rounded because rain, wind, snow, and ice have been grinding them down for millions of years.

**The United States has many beautiful mountains.** The Appalachians are the oldest mountains in North America. Because they are so old, they have



*The Great Smoky Mountains are part of the Appalachians. In which states are the Great Smoky Mountains found?*



*The rugged peaks of the Rocky Mountains. How does the appearance of the Rocky Mountains differ from that of the Great Smoky Mountains?*

become rounded. The mountains of the Western Cordillera are younger and are sharp and craggy. The Appalachians include range after range of mountains. A *range* is a row of connected mountains. The Appalachians run from the Maritime provinces in Canada south to Alabama. These mountains have different names in different places.

The Great Smokies (see picture on page 12) and the Blue Ridge Mountains are parts of the Appalachians. So are the Adirondacks and the White Mountains.

The Western Cordillera, a series of mountains, valleys, and plateaus, dominates the western side of North America. The most easterly mountain range of the Western Cordillera is known as the Rocky Mountains. The Rockies also include many different

ranges with names of their own. Among them are the Grand Tetons and the Wind River Mountains.

Farther west, near the Pacific Ocean, is another great group of mountains. This group includes the Sierra Nevada, the Cascade Range, and the Coast Range.

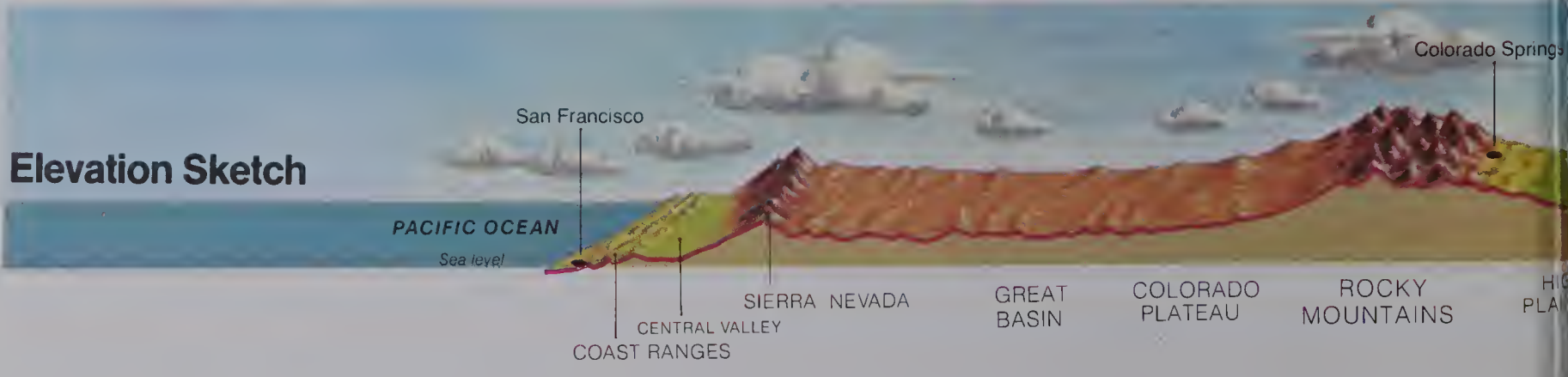
**Fertile valleys lie between some ranges of mountains and hills.** There is a long, wide valley in California, between the Sierra Nevada and the Coast Range. It is known as the Central Valley.

Many valleys were carved out by rivers rushing down from mountains and hills. As water drained off mountain and hill slopes, it washed earth away. Little streams cut their way down the slopes. Gradually the streams carved out small valleys. Farther on, larger valleys were carved out as streams joined other streams and became larger.

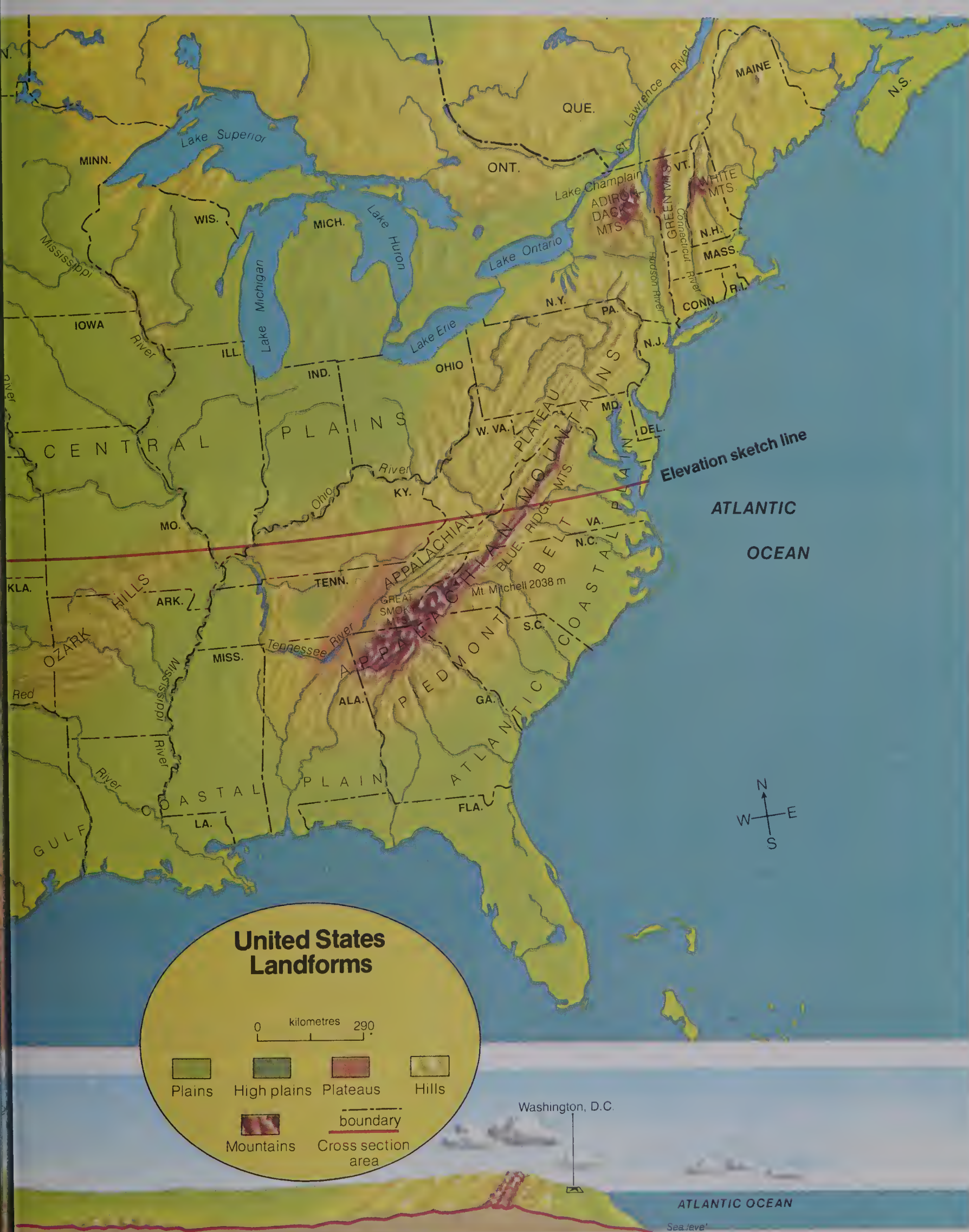
In time the streams would become a river. Most rivers flow to the sea.

**There are many rivers and lakes in the United**









GREAT PLAINS    CENTRAL PLAINS    APPALACHIAN MOUNTAINS    ATLANTIC COASTAL PLAIN





*The Ohio River is important for transportation. Can you tell from this picture what features of the river make it a good transportation route?*

**States.** A river may start high in the mountains when melting snow and ice form little streams. It may begin at a place where underground water bubbles up to form a spring. The place where a river begins is called its *source*.

Two large rivers that empty into the Atlantic Ocean are the Hudson and the Connecticut rivers. Their sources are in mountains which are a part of the Appalachian Highlands.

Many streams hurry down the western side of the Appalachians. They join the Ohio River. When rivers flow into a larger river they are called its branches, or *tributaries*. A river, together with its tributaries, is called a *river system*. The Ohio is a large river itself and it empties into a larger river, the Mississippi. Therefore, the Ohio is a tributary of the Mississippi. The long, winding Missouri is another tributary of the Mississippi. A tributary of the Missouri River, the Milk River, flows through southern Alberta.

The Mississippi is the longest river in the United States. The name Mississippi comes from a Native American word meaning "great river."

Several important rivers flow through the western part of the United States. Two are the Colorado and Columbia rivers.

The source of the Columbia is high in snowy

mountains of British Columbia. This river winds southwestward. It finally becomes part of the boundary between the states of Oregon and Washington.

Thousands of lakes are scattered through the United States. The five Great Lakes extend along a part of the boundary between the United States and Canada. The Great Lakes and the St. Lawrence River together form a valuable waterway. Look at the map on page 15. Notice that one of the Great Lakes lies completely within the United States.

**The United States has many valuable natural resources.** These resources include air, water, soils, climate, forests, oil, and coal.

For a long time man has used many natural resources carelessly. Clean air is necessary for our health. Yet man has allowed the air to become dirty, or *polluted*, with gases, smoke, and other wastes. Harmful chemicals and waste materials have been put into streams, rivers, and lakes. Even the oceans are being affected by the harmful wastes dumped into them.

The people of the United States are one of its greatest resources. Today, the number of people living in the United States is growing.

It seemed for a long time that the United States was so rich in resources that they would never be used up. But now there are so many people that

those resources are getting used up faster and faster. Most of these resources will take hundreds or thousands of years to replace. Some, like oil and natural gas, can never be put back.

Americans, like Canadians, know they must conserve those resources that cannot be replaced. They must also learn to develop new ones. Solar energy is one resource that scientists are working to develop.

*Solar energy* is heat from the sun. The United States gets lots of heat from the sun. The amount of

energy the country gets from one hour of sunlight would supply its needs for about three years. The problem is how to collect, store, and use this power. Scientists are working on solar energy projects in desert areas in the United States. Why would deserts be good places to do this type of research?

What are some ways you can help conserve the natural resources found in Canada and the United States? Can you think of other ways in which we can help fight pollution and conserve resources?

KEY SKILLS PRACTISE

1. On an outline map of North America, mark the following:

- |                       |                         |
|-----------------------|-------------------------|
| Atlantic Ocean        | Sierra Nevada Mountains |
| Pacific Ocean         | Cascade Range           |
| Gulf of Mexico        | Coast Range             |
| Rocky Mountains       | Hudson River            |
| Appalachian Mountains | Connecticut River       |
| Great Lakes           | Ohio River              |
| St. Lawrence River    | Mississippi River       |
| Columbia River        | Missouri River          |
| Mackenzie River       | Colorado River          |
| Arctic Ocean          | Hudson Bay              |
| Rio Grande River      | Yukon River             |
| Nelson River          | Saskatchewan River      |
| Washington, D.C.      | Ottawa                  |
| New York              | Montreal                |
| Edmonton              | Denver                  |
| Los Angeles           | Victoria                |
| Fairbanks             | Whitehorse              |
| Calgary               | Vancouver               |

Color in the areas of densest population in the United States and Canada in red on your map. Write the latest population figures on each country.

2. A) Study the key to the map on pages 10-11 of your book. After each symbol below, explain what it is used to show.

- i. ○ \_\_\_\_\_
- ii. ■ \_\_\_\_\_
- iii. ★ \_\_\_\_\_

B) Use the key to help you name two western cities with populations of more than 100 000. What state are they in? What are their populations?

C) Why did many cities start on rivers?

3. Copy this chart into your workbook, then use the map on pages 14-15 in your textbook. Which areas named at the top of this chart are a part of the states listed at the left? Put a check in the correct column for each state. Some states will have more than one check.

States	Central Plains	Atlantic Coastal Plain	Appalachian Highlands	Great Plains	Rocky Mountains	Gulf Coastal Plain
Colorado						
Georgia						
Ohio						
Virginia						
Indiana						
Tennessee						
Kansas						
Pennsylvania						
New Mexico						
Texas						



4. Study the elevation sketch on pages 14-15 of your textbook to help you decide which place in each pair below is *higher*.

Great Plains or Central Plains

Appalachians or Rockies

Colorado Springs or San Francisco

Atlantic Coastal Plain or Great Plains

### Working with Key Facts

Write the numbers 1 to 5 on paper. After each number, write the word or words needed to complete the following sentences.

1. The streams and rivers that flow into a large river are called its \_\_\_\_\_.
2. The five largest lakes in the United States are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
3. The place where a river begins is called its \_\_\_\_\_.
4. Nature's gifts, such as climate and soil, are called \_\_\_\_\_.
5. The four lakes which Canada shares with the United States are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

### Using What You Know

Find pictures in newspapers and magazines of the many different types of landforms and water bodies in Canada and the United States. Cut them out and arrange them in a booklet with captions about each type and its location.

### Using Key Ideas

1. Why do we say that North America is rich in natural resources? How can we help to conserve them?
2. Why do we have more and more pollution in our environment?
3. How can we help to clean up our air and water? Why is it important for us to do this?

### Learning New Skills

1. Refer to the graph on page 19 as you study these facts and answer the questions that follow them.

The graph on page 19 is a *horizontal bar graph*. The bars that are used to show the data are *horizontal*.

They go *across* the graph.

- How many horizontal bars are shown on this graph?

The numbered line at the bottom of the graph is the *horizontal axis*.

- The left end point of the horizontal axis is marked with what numeral?

The lines drawn across the graph are called *grid lines*. Grid lines are used to help measure bars that are not close to the axis.

- The bar that is farthest away from the axis is the bar for which year?

The numerals along the horizontal axis mark the points where the grid lines meet the axis. These *axis numerals* are used to show the *value* of the bars.

- How many numbered points are there on the horizontal axis?

The label below the axis numerals is the *horizontal axis title*. It tells what the numerals stand for.

- What is the horizontal axis title on this graph?

2. Follow the steps below to find the value of each bar on the graph on page 19. Then answer the questions that follow.

Trace the bar from left to right, stopping at the end of the bar.

If the bar ends on a grid line, follow the grid line down to the point where it meets the horizontal axis.

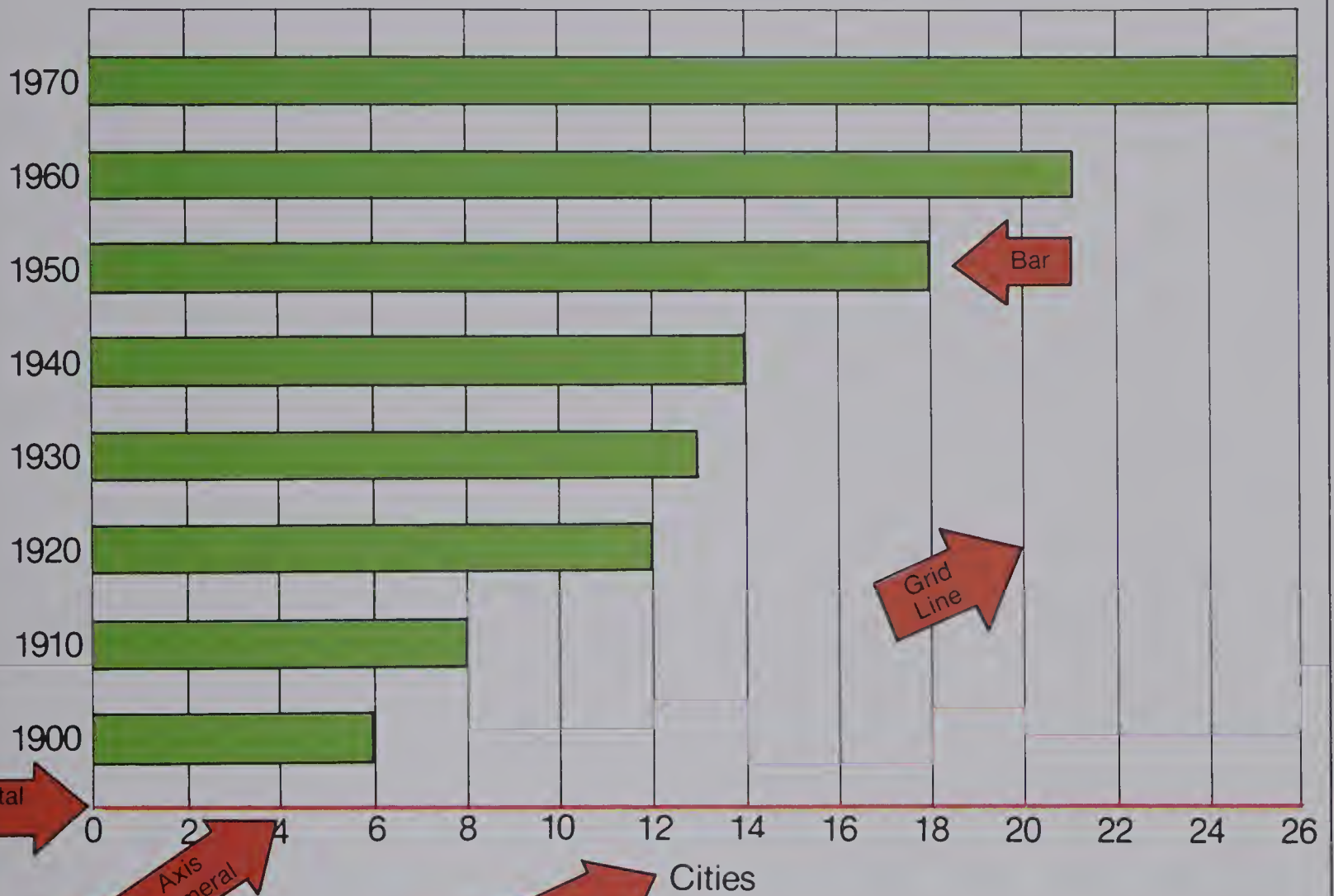
The axis numeral at the bottom of the grid line gives the value of the bar.

If the bar ends between grid lines, find the point on the axis that is just below the end of the bar. Study the numerals on both sides of the point. Use these numerals to help you estimate the number value for the bar.

A) What is the value of the bar that stands for 1900? 1950?

B) The bars for two different years end between grid lines. What are those two years? What are the values of the bars for those years?

number of cities with populations of 500 000 or over



Source: U.S. Bureau of the Census 1980

# *In Focus*

## INVESTIGATING ACID RAIN

Every day, gases and fumes from power plants, factories, and cars rise into the air. These gases mix with water vapor. Rain and snow falling to the ground contain these harmful gases in the form of strong chemicals called acids. This harmful rain is called *acid rain*.

Acid rain falls in the northeastern United States and eastern Canada, especially in Ontario and Quebec.

The biggest single Canadian cause of acid rain is the pollution from Inco Limited, of Sudbury, Ontario. Inco processes nickel, which is used in stainless steel products and coins. The major cause of acid rain in North America is the pollution from the power plants of the northeastern United States. This area includes the Ohio River Valley, the Mississippi River Valley, and parts of Pennsylvania and New York. Many of these plants are run on coal. Although coal is cheaper than oil for energy, it causes more pollution.

The United States produces seven times more air pollution than Canada. Because of the way the wind blows, more pollution comes north from the United States to Canada than goes south from Canada to the United States. In fact, much of the acid rain falling on Canada comes from the pollution from plants and factories in the United States.

Acid rain pollutes lakes and rivers and kills fish. It damages soil, trees, crops, and eats away at buildings. People with breathing problems also feel the effects of acid rain.

If Canada and the United States do not stop the pollution that causes acid rain, both countries will face a serious crisis.

In Canada the northern tourist industry could be ruined. If all the lakes are polluted, people will not come to the North for their vacations. If this happens, people working in the tourist industry will lose their jobs. Ten per cent of Ontario's income comes from this industry.

Already 140 lakes in Ontario have been declared dead. Scientists say 48 000 more lakes are in danger

### HOW CAN ACID RAIN BE STOPPED?

Stopping acid rain is neither easy nor cheap.

Large plants and factories can use filter and cleaning processes to help stop pollution. However, companies like Inco say this is very expensive. If the costs are too high, they say, they will have to cut back production. People will lose their jobs.

By the year 2000, it could cost \$8 billion to save Canada from acid rain. It could cost \$80 billion to save the United States from acid rain.

Who's going to pay?

### USING KEY FACTS

1. What causes acid rain? How is it formed?
2. What do most American power plants use for energy? Why?
3. Name four effects of acid rain.
4. Which Canadian industry will suffer most if acid rain is not stopped? Why?

### USING WHAT YOU KNOW

Imagine that your community has a problem with acid rain.

1. List the effects acid rain would have on your community.
2. Make a list of all the steps you think your community could take to try to stop the acid rain. (First you will have to find out what is polluting the air.)



*Factories such as these contribute to air pollution which results in acid rain.*



# The New England States

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## A Look at New England

New England is made up of six states: Vermont, New Hampshire, Maine, Massachusetts, Connecticut, and Rhode Island. Vermont, New Hampshire, and Maine lie just over the International Boundary from Quebec and New Brunswick.

**Five of the New England States are on the coast of the Atlantic Ocean.** This coast is an irregular one. It has many harbors, large and small. Because it is rocky, the coast is dotted with lighthouses that warn ships away from danger spots.

**Most of New England is mountainous or hilly.** Along the New England coast are low hills. Some have rocky cliffs that border the sea. Inland, the hills become much higher.

Western New England has many low mountains. They stretch in long chains from north to south. New England's hills and mountains are a part of the Appalachian Mountains.

**New England has hundreds of lakes and streams.** Lake Champlain, between Vermont and New York, is the largest lake. It is named for the French explorer who came to Vermont in the 1600s.

The lakes are fed by small streams that flow from the hills and mountains. From the lakes flow other streams that meet to form rivers. In New England the rivers don't have to go far to reach the ocean. As they rush down through the hilly lands, they form rapids and falls. The winding Connecticut River is the largest river in this region.

**New England generally has a moderate climate.** *Climate* is the average weather a place has over a long period of time.

Winters in New England are long and cold. Snow may fall in early November. This region can expect icy winds and snowstorms from December to March or April.

New England's summers are short and pleasantly warm. But generally the weather is not as hot as it is in many other parts of the United States. For one thing, New England is located quite far north. Also, it is often cooled by ocean breezes and cool air from the north.

## Earning a Living from Soil and Sea

New England produces a variety of farm crops. Some farmers supply city markets with chickens, turkeys, ducks, and eggs. Other farmers grow vegetables. Vermont has many dairy farms. Milk companies buy their milk and sell it to stores. Some milk is used for making butter, cheese, and ice cream.

Berries and other kinds of fruit are grown in New England. Many hillsides are lined with rows of apple trees. Apples grow well in the cool climate.

Certain sections of New England are famous for special crops. Vermont has many sugar maples. The sap from these trees is used to make maple syrup and sugar.

Northeastern Maine produces many potatoes. Tobacco grows in the Connecticut River Valley. Some of Cape Cod's lowlands produce cranberries.

**Fishing is an important industry in New England.** It is carried on chiefly along the *banks*, a shelf of sunken land lying off the east coast. Large parts of this shelf rise to form underwater hills and plateaus known as banks. The Grand Banks, off Newfoundland, are the most famous. The waters are quite shallow over the banks. This makes them good places for fish to find food, and for fishermen to find fish. Lobsters are caught in wooden traps sunk in the water. Clams are dug from the mud when the tide is low.

The chief fishing ports of New England are Gloucester, Boston, New Bedford, and Portland.

**New England has about five times as much land in forests as in farms.** More than half of this forest land is in one state—Maine.

In early times lumbering was a major industry of New England.

Much of the lumber was sent to England. It was also used for building ships in New England. In time, New England became famous for its strong, handsome sailing ships.

Today lumber and wood pulp for papermaking are the most important forest industries.







## Manufacturing in New England

Manufacturing is the leading industry in New England today. Thousands of people earn their living working in factories and mills.

New England is known for the production of shoes and other leather goods. There are also factories producing tableware, jewellery, sports trophies, and fine silverware.

The Boston area is famous for its electronic products. Among them are X-ray and radar equipment, computers, and calculators.

## Metropolitan Life

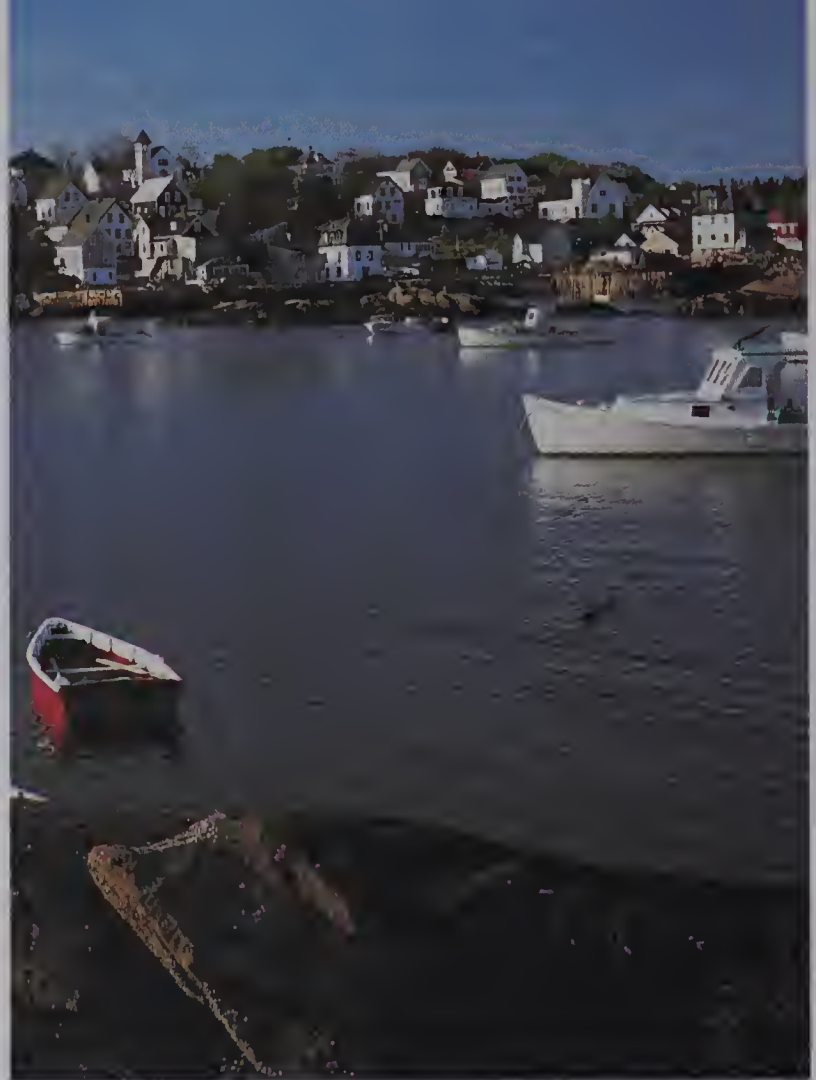
Many cities are crowded together in New England. It is hard to tell where one city ends and the next one begins. The thickly populated areas of New England have many manufacturing and trading centres. They are metropolitan areas. A *metropolitan area* is a large central city with smaller cities and towns around it.

Boston is New England's largest metropolitan area. More than seventy cities and towns make up metropolitan Boston. Boston is a seaport on Massachusetts Bay. It is also a land and air transportation centre. Railroads, highways, and air routes connect it with other parts of the United States.

Boston has many *wholesale* businesses. They buy raw materials and finished products from producers. Then the wholesalers sell these products to *retail* stores or other business firms. Retail stores sell to all people who come to buy.

Boston is a government and educational centre. It is the capital of the state of Massachusetts.

Near Boston are exciting reminders of the country's past. Tourists can visit Plymouth, where the Pilgrims landed in 1620. Northwest of Boston are the towns of Lexington and Concord. At Concord the first shots of the American War of Independence were fired.



What similarities and differences do you think there might be between this New England fishing village and one in the Atlantic provinces?



At work on a trawler. What types of fish are caught off the east coast of Canada and the United States?

## Key Skills Practise

On paper, write each of the following sentences with its correct ending.

1. Most of New England is (hilly.) (plains country.) (lowlands.)
2. The largest New England state is (Massachusetts.) (Maine.) (Vermont.)
3. Some farmers in Maine grow large quantities of (potatoes.) (wheat.) (corn.)
4. Some lowlands on Cape Cod produce many (cranberries.) (potatoes.) (vegetables.)
5. Vermont is famous for its (codfish.) (maple sugar.) (sugar beets.)
6. The largest river in New England is the (Ohio.) (Connecticut.) (Hudson.)
7. New England is noted for its (electronic goods.) (steel.) (glass.)
8. A central city together with nearby cities and suburbs is (a rural area.) (a metropolitan area.) (a seaport area.)

## Working with Key Facts

1. List some things that are manufactured near your home today.
2. Choose one New England state and one Canadian Maritime province. Compare the population density, natural resources, and physical features of the two.
3. Make a chart of some products from the New England states.

Locate the areas in Canada where the same products are found. Tell what the two regions have in common.

## Using What You Know

1. How is New England *different* from the area you live in? How is it *similar*?
2. If you could go on vacation to New England, how would you travel? What would you take along? What places would you visit?
3. If you could go on vacation to the Atlantic provinces, how would you travel? What would you take along? What places would you visit?



# The Middle Atlantic States

There are seven states in the Middle Atlantic region. They are New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, and West Virginia.

The District of Columbia is also in this Middle Atlantic region. It is not in any state. It is the area which contains Washington, the capital of the United States. It lies between Maryland and Virginia.

The Middle Atlantic region has hundreds of cities and towns. Almost one quarter of the people of the United States live in this region. The map shows how thickly settled it is.

This part of the United States has large bays along the coast. New York Bay, Delaware Bay, and Chesapeake Bay are the three most important bays. Chesapeake Bay is the biggest bay on the Atlantic coast from Maine to Florida.

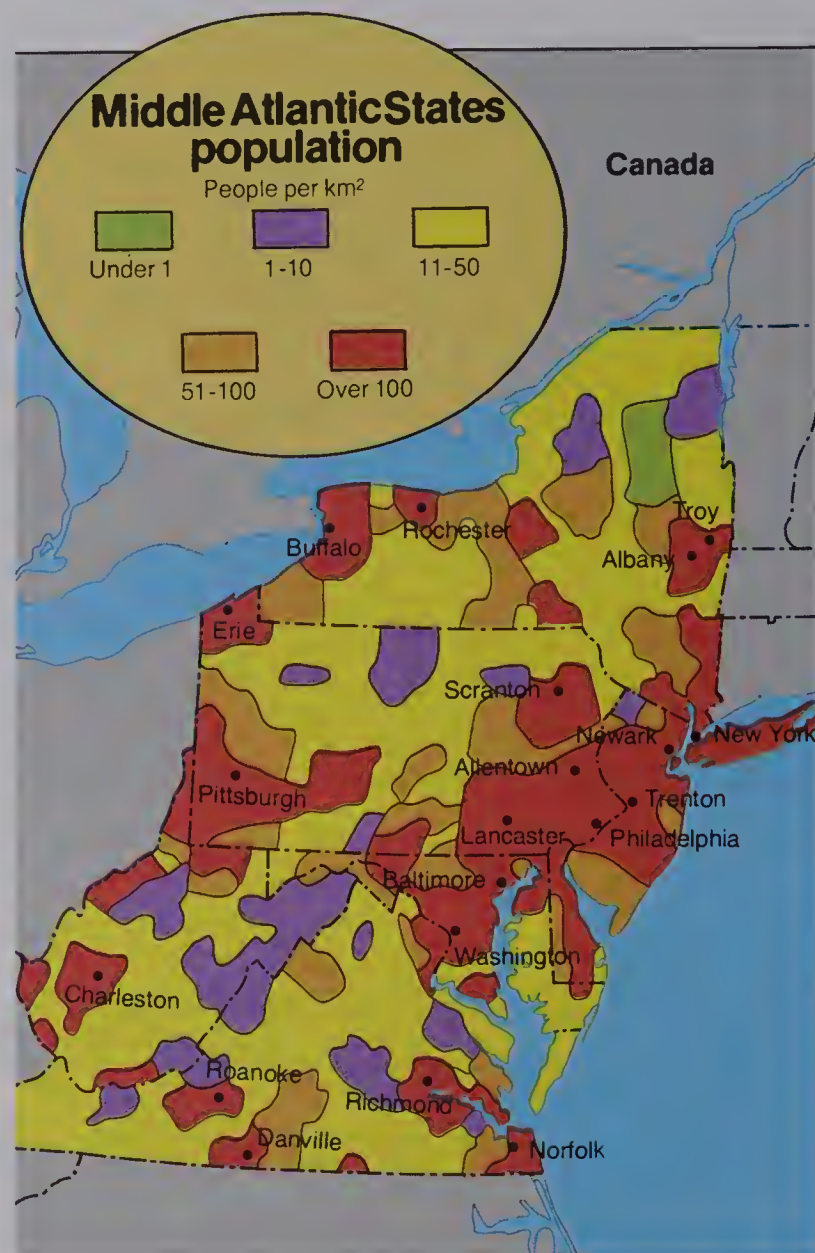
The long piece of land between Delaware Bay and Chesapeake Bay is a *peninsula*. Its lands are low and flat and have many farms.

The Middle Atlantic region has some important plains and mountains. The Atlantic Coastal Plain is almost as flat as a table. It has deep soils and a fairly mild climate, so many crops can be grown.

West of the coastal plain is the hilly Piedmont. The word Piedmont comes from the French *au pied des monts*. This means "at the foot of the mountains." The Piedmont lies between the Atlantic Coastal Plain and the Appalachians. It is a belt of hilly lands "at the foot" of the Appalachian Mountains. There are green valleys, wooded slopes, and many farms in this region.

Between the Piedmont and the coastal plain is the **fall line**. The *fall line* marks the end of the coastal plain. The land on the coastal plain is lower than the land of the Piedmont. Rivers rushing down from the mountains must drop—sometimes many kilometres—to the level of the coastal plain. This means that there are often waterfalls marking the fall line.

Boats cannot go further upriver because of the waterfalls. This meant that towns often sprang up on riverbanks along the fall line. Boats carrying cargo inland would have to stop here and unload. Cargo



from farms and forests further inland could be loaded on boats here for the coast.

Fall-line towns often grew into trading centres. Richmond is on the fall line of the James River in Virginia. Washington, Baltimore, Wilmington, Philadelphia, and Trenton are some fall-line cities.

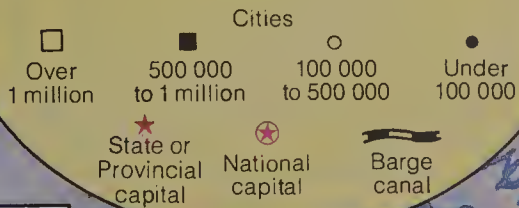
There was another good reason for the growth of towns on the fall line. Waterfalls provided water power to operate factories and mills. The factories and mills helped the towns on the fall line to become manufacturing cities. Busy highways and railroads grew up along the fall line to connect the cities.

The Appalachian Mountains rise west of the Piedmont. They stretch from New England to



# Middle Atlantic States

0 kilometres 100





Alabama. They include many ranges of rounded, worn-down mountains.

The highest peaks are about 1800 m high. Their slopes are covered with forests. There are few low passes in the ridges. Between the long ridges are deep valleys. One of these valleys is called the Great Valley.

**The Great Valley extends through the Appalachians for many kilometres.** It begins in southeastern New York and continues to the middle of Alabama. It is one of the longest valleys in the world. The Great Valley has fertile soil. Its farms produce fine crops.

Coal and limestone are found in some parts of this valley. Some iron ore is also mined. Iron ore, coal, and limestone are used in making steel.

Highways and railroads lead through the Great Valley. Trucks and trains haul farm and mine products to factories and markets.

**West of the mountains are more highland areas.** Coal mining is one of the main industries. Large seams of coal are buried beneath the surface of this region.

**Important rivers flow through the Middle Atlantic states.** The largest rivers are the Hudson, the Delaware, and the Susquehanna. Each of these rivers enters the Atlantic Ocean through a large bay. Each one serves as a main water highway.

The Hudson's source is in the mountains. It flows south through hills and plains and ends at New York Bay.

South of the Hudson is the Delaware River. Many freighters follow this river up to Philadelphia. Some bring raw materials for factories. They carry away manufactured goods. The Delaware River flows into the Atlantic at Delaware Bay.

The Susquehanna River winds through Pennsylvania. This river flows into Chesapeake Bay.

**Niagara Falls and two of the Great Lakes are within this region.** The lakes, Ontario and Erie, are part of the Great Lakes inland waterway. Large freighters travel across the lakes and through connecting rivers and canals. They carry raw materials, such as iron ore and wheat. They go to Buffalo, Cleveland, Erie, Toronto, Hamilton, and other busy lake ports.

By working together, Canada and the United States made this inland waterway more valuable.

## Coal Mining and Steel Manufacturing

**Much coal is mined in the Appalachian region.** The coal is found in layers under the ground. A large area of coal deposits is called a *coal field*. Large coal fields stretch across most of western Pennsylvania and West Virginia.

There are two main kinds of coal. One is *bituminous*, or soft coal. When it is burned, a heavy black smoke pours out. The other kind is *anthracite*, or hard coal. It burns with less smoke.

Some coal lies deep below the earth's surface. To mine it, *shafts* are usually cut straight down to the layers of coal. Then tunnels are dug out from this shaft. The miners dig coal in these tunnels. An elevator carries the miners to and from their place of work. Elevators also carry the coal to the surface.

In some soft-coal mines a tunnel is cut into the layers of coal from the side of a hill. The coal is loaded on small railway cars and brought to the tunnel entrance.

When coal deposits are close to the surface of the earth, *strip mining* is used. Giant machines remove the earth that covers the coal. Then the coal is broken up and loaded onto trucks. Strip mining damages the land more than deep mining does. Mining companies must repair the damage caused by strip mining. They must level the land and plant trees or ground cover.

**Coal, limestone, and iron ore are used in making iron and steel.** One of the largest iron-ore deposits in the world is located along the shores of Lake Superior. Much of the iron ore in the United States comes from this deposit. Boats haul the iron ore across the Great Lakes to the steel mills.

## Many Important Cities

**Most Middle Atlantic cities are manufacturing centres.** Buffalo, New York, has flour and feed mills and a huge cereal-packing plant. Some factories make iron and steel products. The wheat and iron ore are brought in by boats.

In Schenectady, New York, locomotives, washing machines, refrigerators, and many kinds of electrical goods are made. Rochester is known for its cameras, film, and copying machines. Other cities in New York produce clothing, steel, paper, and metal products, including parts for automobiles and planes.



*How does strip mining damage the environment?*



*What are the dangers of working in a deep mine?*





Cement, trucks, and buses are manufactured in Pennsylvania. Some cities in eastern Pennsylvania have textile mills.

The five largest cities in this region are New York, Philadelphia, Pittsburgh, Washington D.C., and Baltimore.

**New York is the largest city in the United States.** New York City is made up of five sections called boroughs. Metropolitan New York extends far beyond these boroughs.

Manhattan is the heart of the city and the chief business centre. New York City has famous museums and art and educational centres. It is also widely known for its theatres and music halls. It is a leading magazine and book publishing centre. And, of course, it has thousands of factories and other businesses.



*New York is an important part of the megalopolis that spreads across the northeastern part of the United States. What is a megalopolis? What are some of the advantages and disadvantages of living in one?*

**New York is the greatest seaport in the United States.** It has more than 960 km of busy docks and wharves.

Hundreds of ships can tie up at these docks at one time. More than 10 000 ships from many different nations enter or leave the port every year. They bring many kinds of raw materials and finished goods from other lands. Ships bring such imports as oil, sugar, coffee, tea, and bananas.

Ships carry to other countries the goods the United States exports. Wheat and other farm crops are exported. So are machinery, tools, textiles, and other factory products.

About 300 trucking firms and a dozen railroads serve the port. They bring products to be exported. They haul away the imports.

**New York's location has helped it to become a giant city.** It is at the end of an inland water route from the Great Lakes. Railways, highways, and airlines connect New York with every part of the United States. They move huge amounts of raw materials and finished products to and from the city. New York, therefore, has become a great manufacturing, trade, and business centre.

**Philadelphia, in Pennsylvania, is another busy port and manufacturing city.** It faces the Delaware River. Ships from the Atlantic Ocean sail up this broad river to the piers and docks. The waterfront extends for about 52 km.

Philadelphia is a key transportation centre. Railways, highways, and airways connect it with other parts of the country. Factories turn out machinery, electronic equipment, textiles, and other products.

**Philadelphia is an exciting city, partly old and partly new.** It was founded in 1682 and has many lovely old buildings. The Declaration of Independence was signed in stately Independence Hall in this city.

Downtown Philadelphia has large buildings with stores and offices. But there are no towering skyscrapers. No building is higher than City Hall, which is topped by a tall statue of William Penn, the city's founder.

Metropolitan Philadelphia spreads out far beyond the city itself. It has fine universities, libraries, and art and music centres.

**Pittsburgh, Pennsylvania, is a city of iron and steel manufacturing.** This river port grew up on the



point of land where the Allegheny and Monongahela rivers meet. They join and become the Ohio River.

Barges crawl up and down these rivers. They haul coal, iron ore, and other materials to Pittsburgh's factories and mills. Freight trains chug along the banks of the rivers. Some cars are loaded with limestone, coal, and iron ore for Pittsburgh's steel mills. Pittsburgh is well-known for its steel mills and for factories which make products from steel. Other plants produce glass products, chemicals, electrical equipment, and food products.

Not long ago, waste materials from the mills and factories were polluting the air. Also, the centre of the city was old and rundown. So people decided to work together to improve conditions.

People studied how to keep factories from polluting the air. Then laws were passed to stop the pollution. Many old buildings were torn down and replaced by new buildings and parks.

**Baltimore is a large port and factory city on Chesapeake Bay.** This city is about 320 km from the ocean. It has a fine harbor, and its port does much business. Industrial and business districts are both near the harbor.

### **Farms and Foods in these States**

**Many farms are scattered through the Middle Atlantic states.** Dairy and poultry farms are near the cities. Farther away, mixed farming is carried on. *Mixed farming* means the raising of several kinds of crops and livestock.

New York and Pennsylvania are noted for their dairy farms and fruit orchards.

The fertile Lake Ontario plain in western New York grows vegetables and fruits, such as apples, grapes, cherries, pears, and plums.

Vegetable, dairy, and poultry farms are spread across New Jersey and Delaware. This is one of the chief vegetable-farming areas in the United States. Some of the many kinds of vegetables raised here are sold fresh. Tonnes of them are canned or frozen. Farmers in these states also raise melons, strawberries, peaches, pears, and apples.

**Maryland and Virginia are rich farming states.** Fruit orchards are very large. There are also fields of berries, tomatoes, and vegetables.

Maryland has "oyster farms" in Chesapeake Bay.

Farmers drop millions of tiny oysters into the small protected inlets. The oysters stick to rocks on the floor of the bay. After they grow for three or four years, they are ready to harvest. They are loosened with long-handled tongs and gathered into boats. Some oysters are sold fresh, some are frozen, and many are canned.

On Virginia's sandy coastal plain, peanuts are raised. The plants have whitish-yellow blossoms. After the blossoms fall, the flower stalks bend over and push their heads into the soil. Then the peanuts begin to grow. In the fall the plants are dug up and dried. The peanuts are then torn from the plants by a threshing machine.

Southern Virginia farmers, or planters, raise lots of tobacco, mainly in the Piedmont section. The large tobacco leaves are hung in small curing barns to dry. These barns are found on most tobacco farms. Some farms have as many as fifteen. The dried, or cured, tobacco is sold to factories to be made into tobacco products.

## Key Skills Practise

1. On paper write the letters A) through G). For each letter, write the word or words needed to complete the following sentences correctly. Use the words in the list that follows the sentences.

- A) The four largest cities of the Middle Atlantic region are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
- B) Lakes \_\_\_\_\_ and \_\_\_\_\_ border the Middle Atlantic region.
- C) Ocean-going vessels can travel from the Atlantic to Lake Superior on the \_\_\_\_\_.
- D) New York is the United States' largest \_\_\_\_\_.
- E) Much tobacco is raised in \_\_\_\_\_.
- F) \_\_\_\_\_ has many oyster farms.
- G) Iron ore and limestone are used in making \_\_\_\_\_.
- H) Great coal fields lie in \_\_\_\_\_ and \_\_\_\_\_.

### List of words

Pittsburgh	Baltimore
Maryland	Virginia
megalopolis	Pennsylvania
Ontario	Philadelphia
West Virginia	St. Lawrence Seaway
New York City	Erie
plain	Huron
Chicago	steel

2. Compare New England and the Middle Atlantic regions using the maps on pages 14 and 15, 23, and 27. Answer the questions below in class or in your workbooks.

- A) Which region is larger?
- B) Which is farther north?
- C) Which has more large cities?
- D) Which has a longer growing season?
- E) Which has the most favorable climate for growing crops?
- F) Which has more large rivers?

## Using What You Know

1. What is the fall line? Why have cities grown up along it?
2. Name two kinds of coal. How do they differ?
3. What natural resources are used in making steel?
4. Why is the steel industry so important?
5. What are some jobs in the steel industry?
6. How does strip mining damage the land? How can the damage be corrected?

## Fun with Maps

The Middle Atlantic states have many cities. The larger ones are named on the map on page 27. The map key gives you an idea of their sizes. Let's use it.

Locate Pittsburgh, Pennsylvania. Is it about the size of New York City or of Baltimore? Look at the key and decide. What other cities have a population about the same as Pittsburgh?

On the map, find Syracuse in New York state. What does the map tell about its size? How many cities in the Middle Atlantic states have more than 100 000 people?

# *In Focus*

## THE ST. LAWRENCE SEAWAY

### Planning the Seaway

It took only five years for Canada and the United States to build the St. Lawrence Seaway. Making the decision to build it took much longer.

Various groups in Canada and especially in the United States were against the idea. The large railroad companies thought that once ships could go directly from the Great Lakes to the Atlantic Ocean, the railroads would lose business.

The port cities on the Atlantic coast didn't like the idea either. Ocean-going ships would be able to go straight to inland cities. They would not have to stop at the Atlantic ports. Even owners of ships already using the Great Lakes were against the idea. They were afraid of competition from the big ocean-going ships. All these groups got together to stop the St. Lawrence Seaway.

Later it was suggested that the St. Lawrence River be developed for hydro-electric power as well as for deep-water shipping. This plan was blocked in the United States.

Finally, in 1946, Prime Minister Louis St. Laurent of Canada told President Harry Truman of the United States that Canada needed more hydro power and a deep-water channel. With or without American help, Canada would build the seaway.

Even though various groups in the United States still fought the idea, at last both governments agreed to build the seaway. They would also build hydro-electric power plants. Both Canada and the United States would benefit. The total cost would be \$1 billion. Canada and the United States would share this cost.

Work began on August 10, 1954.

### Building the Seaway

The St. Lawrence Seaway connects Montreal with the Great Lakes. Some parts of the Seaway are in Canadian waters. Some parts are in American waters. The section between Ogdensburg, New York, and Cornwall, Ontario, is the International

Section of the Seaway. This section of the St. Lawrence River used to flow very quickly. A dam was built here which turned the section into a broad lake. This is the site of a large hydro-electric power plant. The plant is owned equally by Ontario Hydro and the Power Authority of New York.

The St. Lawrence Seaway has many locks. *Locks* are enclosed parts of a waterway. Each lock has a gate at either end. The level of water inside the lock can be changed to lift or lower boats from one level to another. Each lock of the St. Lawrence Seaway can hold an ocean-going ship 222.5 m long.

Ocean-going ships need deep water. To make the Seaway deep enough, many thousands of hectares of nearby land in Canada and the United States were flooded. In Canada seven towns which were flooded were replaced by three new towns. Railways and highways had to be moved.

Engineers working on the Seaway had to plan for new bridges, highways, and tunnels. At one time, more than 22 000 people were working on the project.

In spring 1959, the Seaway was opened to shipping. It was officially opened on June 26 of that same year by Queen Elizabeth II and the American President, Dwight Eisenhower.

### USING KEY FACTS

1. Name two groups who opposed the plan to improve the St. Lawrence River shipping route. Why were they against the plan?
2. When did Canada decide to build the Seaway without American help?
3. Why did Canada want to build the Seaway?
4. When did the American government agree to build the Seaway with Canada?
5. How much did the Seaway cost? Who paid for it?



6. When did the building start?
7. Who owns the hydro-electric power plant in the International Section?
8. How was the Seaway made deep enough for ocean-going ships?
9. When was the St. Lawrence Seaway officially opened?

### USING WHAT YOU KNOW

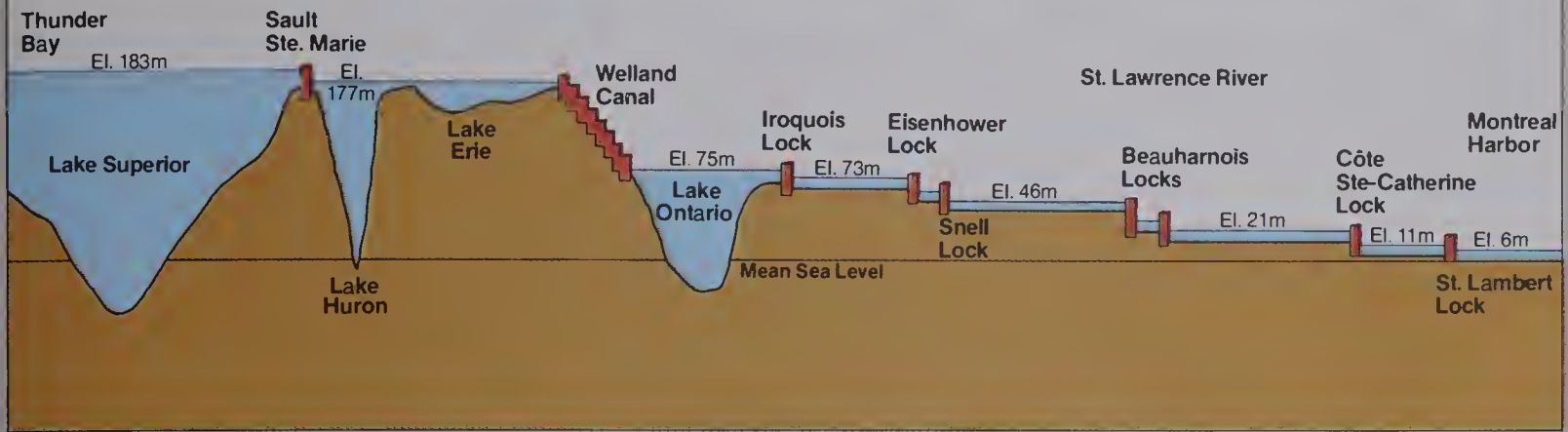
1. Working with a partner, make a timeline showing all the events that led up to the final opening of the St. Lawrence Seaway.
2. A) Find out how many ships pass through the St. Lawrence Seaway each year.  
B) What type of cargo do these ships carry? (Use a pie graph to show your findings.)
3. Some towns and villages had to be flooded to make way for the St. Lawrence Seaway. Imagine that your home is in one of them. Write a letter to a friend telling how you felt when you got the news, and about your plans for the future. Do you think you would feel sad knowing you could never go back to your home? Perhaps you like the thought of big ships sailing just above what used to be your street.



*One of the many locks along the St. Lawrence Seaway.*

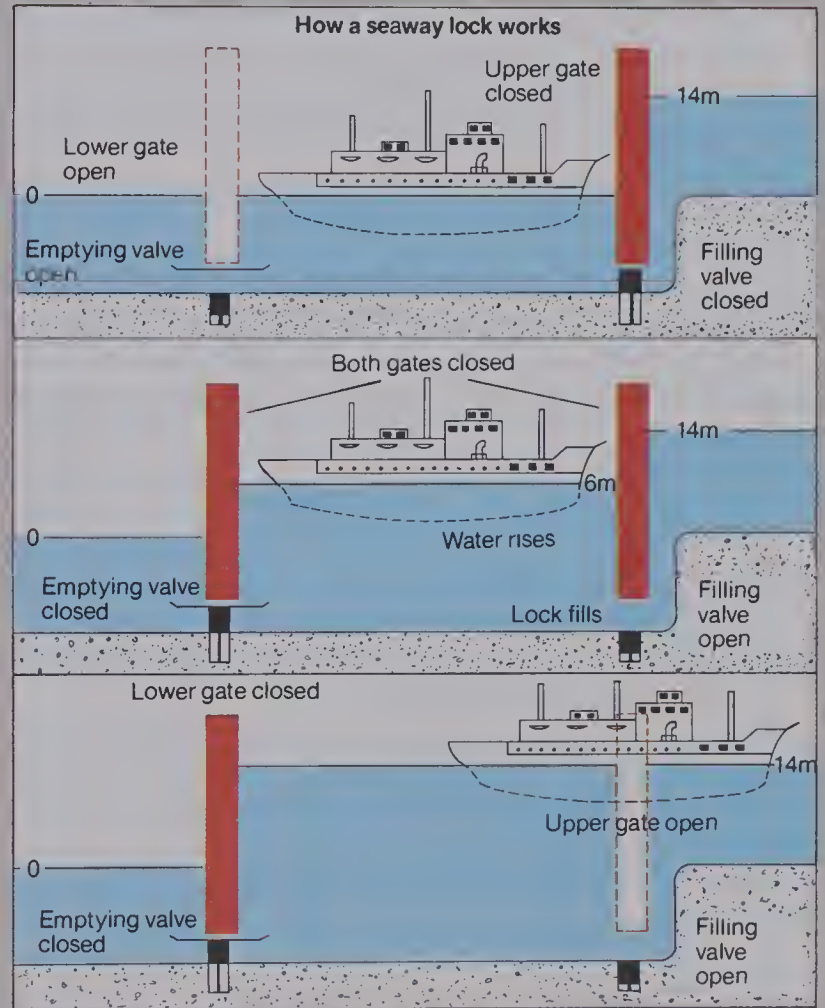


*A cross-section of the Great Lakes - St. Lawrence waterway.*



*This type of lock is called a gravity lock. Why?*

*The locations of the locks along the St. Lawrence Seaway.*



# The Central States

## Looking at the Central States

The Central states spread across the middle of the United States. This region is often called the Middle West. Thirteen states share this fertile Central region. Ohio, Michigan, Wisconsin, Minnesota, and North Dakota lie along the boundary between Canada and the United States. Kentucky, Missouri and Kansas are the southernmost states of the region. In between lie Indiana, Illinois, Iowa, South Dakota, and Nebraska.

**Rolling plains sweep across most of the Central region.** The lands east of the Missouri River are called the *Central Plains*. They begin just west of the Appalachians. They have fertile croplands.

The *Great Plains* begin west of the Missouri River. They stretch west to meet the Rockies. The Great Plains are higher and drier than the Central Plains.

**Hills and mountains frame parts of the Central region.** On the east the Appalachians reach down through Ohio and Kentucky. On the west are the high Rockies.

The wooded Ozark Hills spread over southern Missouri. Other areas of hills reach through parts of Wisconsin and Michigan. The Black Hills rise on the western edge of South Dakota.

There are many important rivers in this region. Most join the Mississippi. The United States government has deepened the channels of the Mississippi River. Now boats can travel far upstream. They can dock at Minneapolis and St. Paul in Minnesota. They can go up the Ohio River to Pittsburgh. Strings of low, flat barges are the freight cars of the river. They are pushed by powerful tugboats. Barges carry heavy loads such as coal and automobiles.

The Great Lakes are in this region. With the St. Lawrence River they form an important inland waterway. The Great Lakes and the Mississippi River and its branches provide cheap transportation for goods.

**The Central region has several different climates.** The winters in the northern parts are long and cold. Minnesota and Wisconsin often have heavy snowstorms. The snow remains on the ground much longer than it does in Kentucky or Missouri.











Corn, wheat, and other crops are raised in the midwest. Dairy farming is also an important activity.

Summers are hot and often humid, or damp. They are longest and hottest in the southern part of the region. This means that crops can grow for a longer time in Kentucky than they can in northern Michigan. Killing frosts may come to northern Michigan early in the fall.

Most areas in the Middle West receive 500 mm or more of rain each year. Much of the rain comes in the late spring and early summer when the growing crops need it most.

The western section of the region is the driest part. Farmers in this western section grow crops such as wheat that need less rain.

### Farmers and Fields

**Farming is a business operation, but a risky one.** Farmers do not get regular paychecks. Their *income*, or pay, depends on what they receive for what they sell.

Farmers want to be sure their income will pay the bills. They also hope to earn a profit. A *profit* is money left after all expenses are paid and the owners

have paid themselves a wage for their own work. Farmers try to know what crops may make a profit. They try to figure the total cost of raising each animal.

### The Middle West is the Corn Belt

**Corn is the biggest and most valuable crop in the United States.** More land is used for producing corn than for any other crop. Although some corn is raised in nearly every state, the main corn-growing area is the Corn Belt. The Corn Belt extends from eastern Ohio to the edge of Colorado. The leading corn-producing states are Iowa, Illinois, and Indiana.

**Most of the corn is used as feed for hogs and other livestock.** Some food products are made from corn. Among them are cereals, corn meal, syrup, cooking oil, and margarine.

Corn is also used in making paint and some other non-food products.

**Mixed farming and feedlots are found in the Corn Belt.** Corn farms also grow oats, barley, wheat,





*A combine is used to harvest corn.*

soybeans, and hay. Many farms have feedlots where meat animals are fattened for market. Thousands of calves are bought from ranches in Texas, Montana, or other parts of the west. They are fed corn, soybeans, and other foods for six months. Then they are ready to sell.

The Corn Belt has the leading hog-producing states. Hogs provide bacon and ham.

There are large stockyards in St. Louis, Missouri; Milwaukee, Wisconsin; Omaha, Nebraska; and Kansas City. There are also smaller stockyards in many cities in the Corn Belt. Animals are sent to stockyards from farms.

From the stockyards, the cattle and hogs are driven into packing plants. There they are killed and prepared for market. Some meat is canned. Ham and bacon are preserved in other ways. Most of the meat is sold fresh. Refrigerator trucks and railroad cars carry the meat to all parts of the United States.

### **American's "Bread Basket"**

**Large quantities of wheat are raised in the west-**

**ern Central states.** These states make up a large part of the country's Wheat Belt. This has been called America's "bread basket." This belt's fertile soil and fairly dry climate are well suited to growing wheat. Two main kinds of wheat are grown.

**Winter wheat grows in the southern part of the Wheat Belt.** Kansas is a leading winter wheat state. Farmers prepare their fields in the late summer and sow the seeds in the fall. Within a few weeks the fields are green. The plants are several inches tall.

Cold weather stops growth, and snow covers the wheat. The snow protects the roots of the plants. When the warm spring days come, the plants grow very fast. By June this winter wheat is ready to be cut and gathered.

**Spring wheat is raised in the Dakotas and Montana.** The wheat must be planted in the spring. It is ready to be harvested in the late summer.

**Elevators store the wheat after the grain is harvested.** There is equipment for unloading, cleaning, and storing grain at the elevators. The grain is stored there until it is hauled to the mills.

### **Some Other Foods**

**Many farmers in the Central region raise vegetables and fruits.** Some farms grow such vegetables as peas, tomatoes, sweet corn, beans, and potatoes. A part of this fresh produce is sold in city markets, but much of it is canned or frozen.

Other farms specialize in growing fruits and berries. Along the shores of Lake Michigan are many fruit orchards. Apples, peaches, grapes, plums, and pears are grown.

**A wide Dairy Belt reaches across the northeast.** It extends from North Dakota through New England. The Dairy Belt has long, cold winters and rather short, rainy summers. Such lands are not well suited to many kinds of farming. However, there are green pastures and good hay crops, which make this area good for dairy farming.

Dairy farmers are busy people. In the summer they raise hay and some corn for winter feed for their cattle. The green hay is cut, dried, and put in bales. The bales are stored in the haylofts of huge barns.

Corn is cut while still green. Its stalks, leaves, and ears are fed into a chopping machine. The chopped corn is blown through huge pipes into a silo. This corn feed is called silage. It stays fresh stored in the

silos. Silage and hay are used to feed dairy cattle all winter long.

Winter and summer, the cattle must be tended. Every morning and evening they must be milked. Most milking is done by machine. The milk flows through pipes to a cooling room. At the dairy plants, milk is pasteurized, or heated, to destroy germs. Then it is cooled and sealed in cartons.

**Fresh milk is turned into other dairy products such as cream, butter, and cheese.** Milk is poured into the tanks of separator machines. As the milk whirls around, the cream separates from the rest of the milk. The cream comes out of one spout. The skimmed milk flows out of another.

Cream can be churned into butter. Some churns are so large that they can make as much as a tonne of butter at one time. Minnesota is the leading butter-producing state.

Milk can be used to make cheese. Wisconsin is the leading cheese-making state.

### **Mining in the Central Region**

**Certain parts of the region are rich in iron ore.** About four-fifths of the iron ore comes from near Lake Superior. There are ore deposits from eastern Minnesota through northern Wisconsin and into Michigan.

Some ore is near the top of the ground. Miners scoop it out of open pits with large power shovels. Most of the rich ore has been mined. Today most ore comes from low-grade deposits. A deposit which consists of about thirty per cent iron ore is known as *taconite*. Taconite iron ore is refined near the mines. The refining produces rich ore in the form of pellets.

Freight cars haul the ore and taconite pellets to ports on Lake Superior. Long ore boats haul their cargo to large steel centres such as Gary, Chicago, Detroit, Cleveland, and Buffalo. Some is then sent on freight cars to inland steel centres like Pittsburgh.

**Other mineral resources are found in the Central region.** Coal is mined in Illinois, Indiana, and eastern Kentucky.

Deposits of limestone are found in Michigan, Ohio, Indiana, Illinois, and other states. Some limestone is used as a building material.

Salt lies beneath the ground in Michigan, Ohio, and Kansas. Farmers give salt to their livestock. It is also used in some industries.

### **Some Large Cities**

**There are dozens of busy cities in the Middle West.** Most of them are manufacturing centres.

Millions of autos are made in Michigan's cities. Some cities in Illinois make farm machinery, railway cars, and other iron and steel products. Akron, Ohio, is called the rubber capital. More rubber tires are made there than anywhere in the United States.

Some cities in Ohio have steel mills. Milwaukee, Wisconsin, is a busy lake port. It manufactures many kinds of goods, including farm machinery. Minneapolis, Minnesota, has huge meat-packing plants and flour mills. So do Omaha, St. Louis, and Kansas City. Shoes, clothing, and electrical products are made in St. Louis.

The three largest cities in this region are Chicago, Detroit, and Cleveland.

**Chicago is the second largest city in the United States.** Nearly seven million people live and work in the metropolitan Chicago area.

Chicago is a lake port on the southwestern shore of Lake Michigan. It is a leading transportation centre. Boats bring in raw materials from other lake ports. They carry away manufactured products, grain, and meat.

Ocean-going ships move along the St. Lawrence Seaway to reach Chicago. A canal and river link the city with the Mississippi. Chicago is in the heart of the Corn Belt. Thus, it is a busy grain-trading centre.

Chicago is a leading producer of iron and steel. It makes food products, transportation equipment, farm machinery, and many other products. This city is well-known for its research laboratories.

**Detroit is the automobile capital of the world.** More autos and trucks are produced there than in any other city. Machinery, tools, chemicals, and other goods are also made in Detroit.

Like Chicago, Detroit has a good location. It is near steel mills and coal mines. It is on the waterway between Lake Erie and Lake Huron, so it is linked to many other cities by the St. Lawrence Seaway. Ships can sail to and from Detroit with raw materials and manufactured goods.

Cleveland, Ohio, is a busy port on Lake Erie. It is a leading city in the manufacture of iron and steel products.

**Pollution has harmed some of the Great Lakes.**



Cities poured sewage into the lakes. Factories dumped their wastes. Lake Superior has been polluted with waste from taconite ore refineries.

But today many people are working to clean the waters. Cities are treating sewage. Companies are putting in equipment to cut down pollution. This clean-up job costs a lot of money. But people know that the job must be done.

**Key Skills Practise**

In List A are beginnings of sentences. The endings are in List B. Write the complete sentences on a piece of paper.

- List A**
1. The Central states
  2. The drier parts of the central states are
  3. Corn is the United States's
  4. The Native People taught the settlers
  5. A silo stores
  6. Machines such as tractors and combines
  7. The western Central states raise enormous
  8. Wisconsin's farms produce.
  9. Most of the corn in the United States is
  10. Parts of Michigan, Wisconsin, and Minnesota
  11. Chicago is
  12. Detroit is called

- List B**
- A) quantities of wheat.
  - B) how to grow corn.
  - C) cattle feed.
  - D) have rich deposits of iron ore.
  - E) many kinds of cheese.
  - F) the automobile city.
  - G) are a rich agricultural region.
  - H) the second largest city in the United States.
  - I) biggest crop.
  - J) the western lands of Kansas, Nebraska, and the Dakotas.
  - K) fed to cattle, hogs, and poultry.
  - L) help many of the wheat farmers.
  - M) have few cities.

**Using What You Know**

1. How does the central region differ from your province?
2. How do winter wheat and spring wheat differ?  
Copy this chart in your workbook and answer the questions.

	Winter Wheat	Spring Wheat
Where is it grown?	_____	_____
When is it planted?	_____	_____
When is it harvested?	_____	_____

## Learning New Skills

1. A road map shows highways, cities, and other important places. To help people locate such places, letters and numbers are often placed at the edge of a map.

Look at the picture map below. It shows one section of a community. Notice the numbers and letters shown along the edges of the map. Use them to locate places in this section.

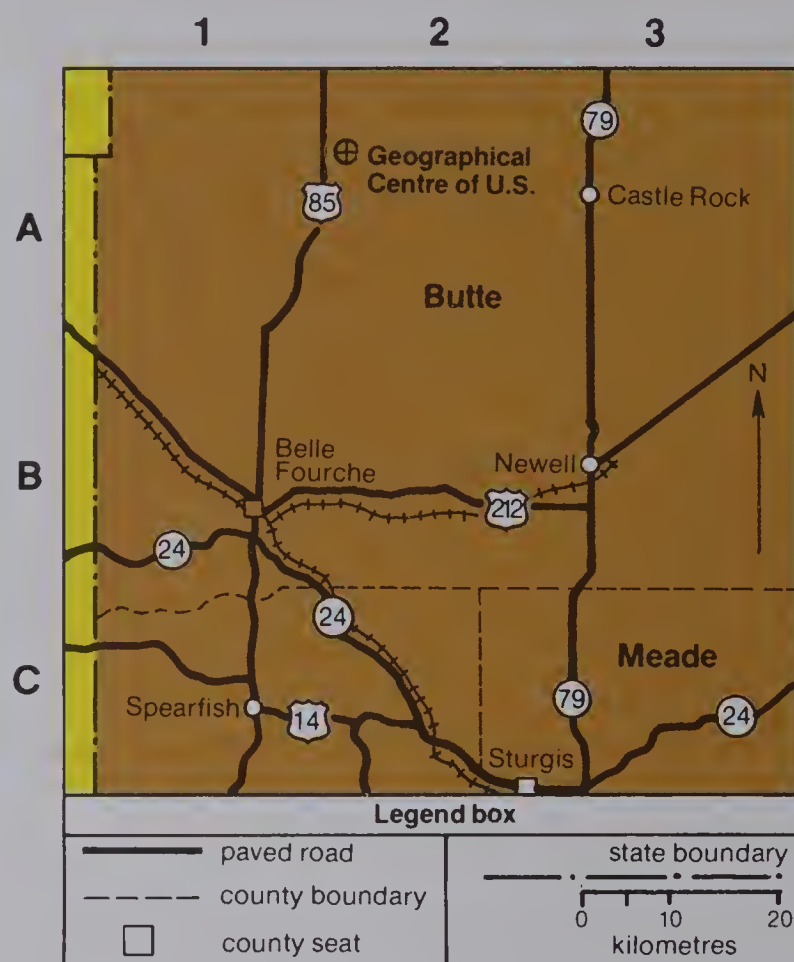
Locate the school at C 3. First find C at the northern and southern edges of the map. Then find 3 on the eastern and western edges. Now move one finger down or up from the C in a straight line. Move another finger straight across from 3. Notice that your two fingers meet where a line from 3 crosses a line from C. The school is located there, as you can see.

Use the letters and numbers on the map below to help you answer these questions:

- A) What is at A 1?
- B) Where is the church located?
- C) What do you find at C 1?
- D) What is at A 2?
- E) Where is the fire department located?
- F) What is at D 2?
- G) In which direction is the church from the fire department?



2. A section of a road map is shown below. In your workbook write the numbers 1 to 6. Beside each number write the word that correctly completes the sentence.



1. In section 3C you will find a \_\_\_\_\_.  
(railroad) (gravel road) (boundary)
2. In section 2C you will find \_\_\_\_\_.  
(Butte county seat) (Newell)  
(the junction of Routes 24 and 14)
3. The geographical center of the United States is in \_\_\_\_\_.  
(2B) (1A) (2A)
4. The geographical center of the United States is within 32 km. of \_\_\_\_\_.  
(South Dakota's western boundary)  
(Butte County's southern boundary)  
(Meade County's northern boundary)
5. In section 1C you will find \_\_\_\_\_.  
(a railroad station) (Sturgis)  
(a county boundary)
6. Several highways and railroads meet in \_\_\_\_\_.  
(1B) (2A) (3C)



3. The graphs below are *vertical bar graphs*. The bars that show the data are vertical. They go up-and-down. The vertical line through the zero point is the *vertical axis*. *Vertical axis titles* are placed above or to the left of the vertical axis numerals.

1. In your workbook write out each true sentence.
  - A) On Graph A, the grid lines are horizontal.
  - B) Each grid line is marked with a numeral.
  - C) In 1920, less than ten cars were registered.
  - D) More than twice as many cars were registered in 1930 as in 1920.
  - E) Over 25 million cars were registered in 1940.

4. In your workbook complete each sentence using dates from Graph B.

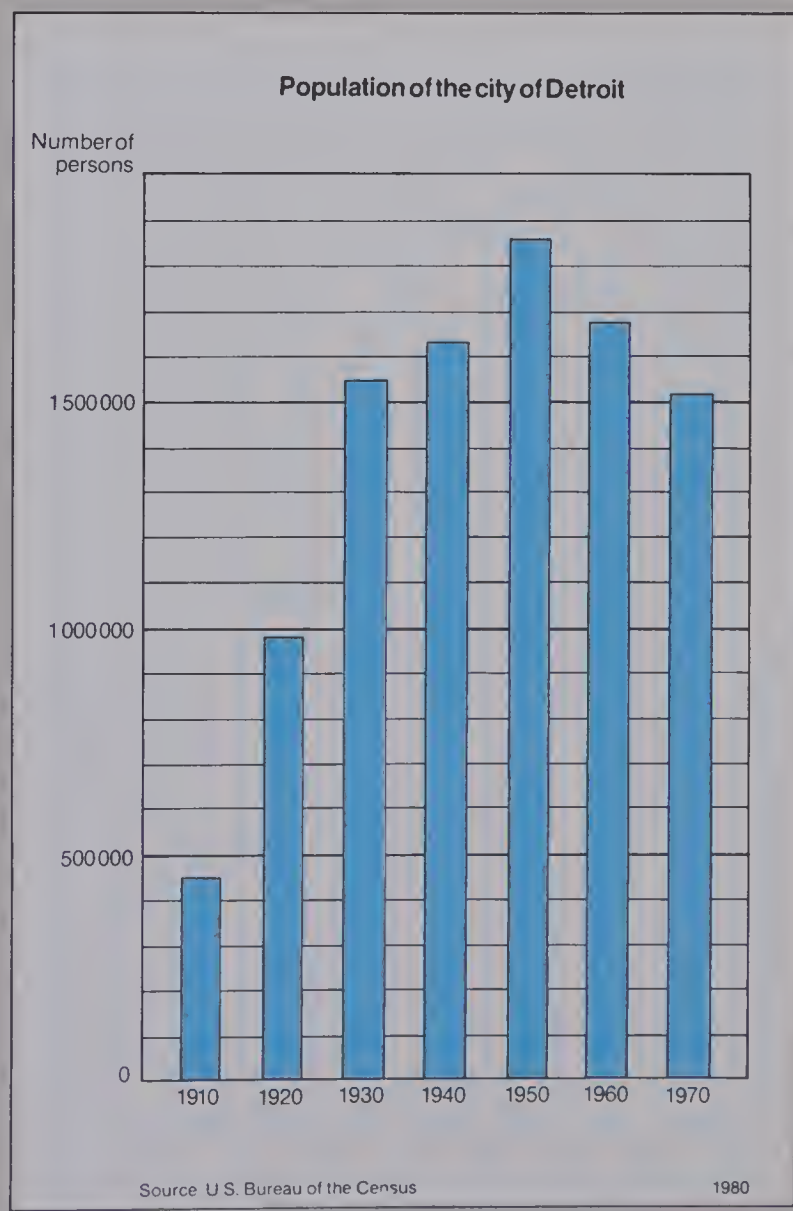
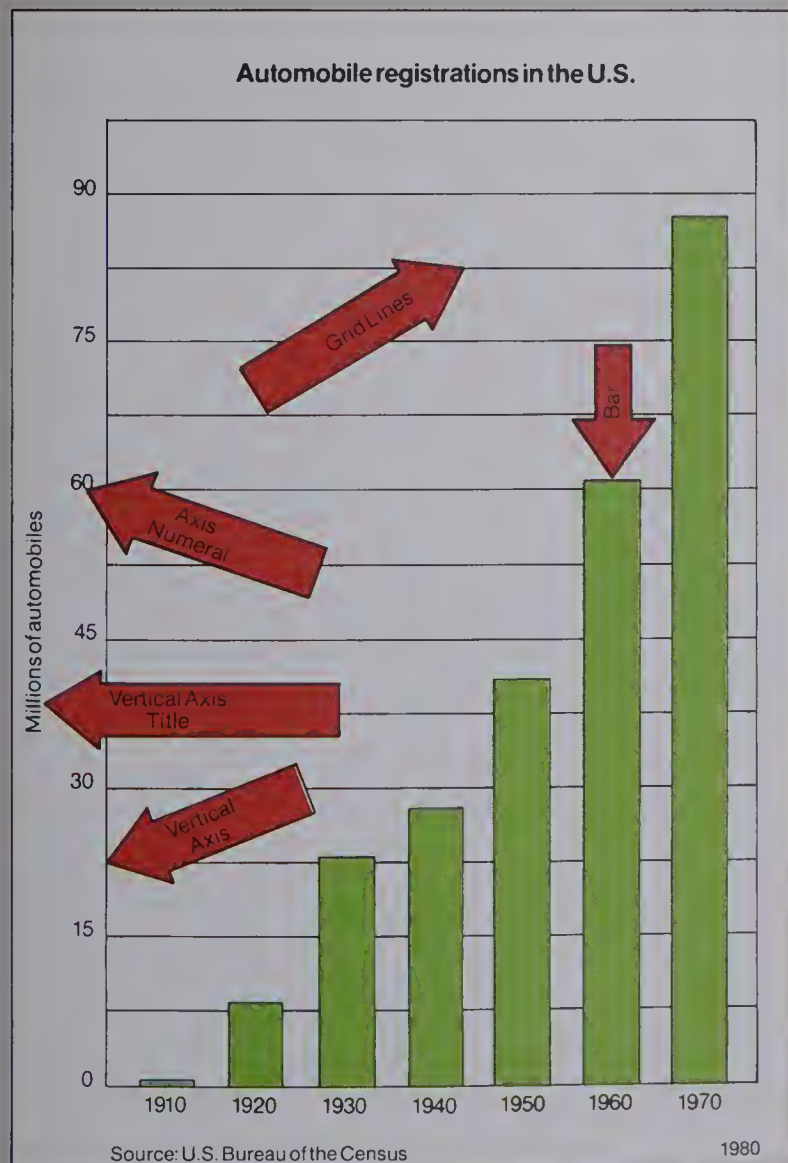
- A) The largest population shown on the graph is for the year \_\_\_\_\_.
- B) The smallest growth shown is between the years \_\_\_\_\_ and \_\_\_\_\_.
- C) The growth that took place between 1910 and 1920 is about the same as between \_\_\_\_\_ and \_\_\_\_\_.

5. In your workbook write each group of words that is a correct completion of the sentence below.  
Use both graphs.

Both graphs show

- A) the same range of numbers.
- B) the same years.

- C) the smallest change between 1930 and 1940.
- D) a high point of 87 million.
- E) a rise between 1910 and 1930.



## *In Focus*

### GARRISON DIVERSION PROJECT

#### **North Dakota Says “Yes” to Garrison Project**

North Dakota wants more water for the dry eastern and central parts of the state. The Garrison Diversion Project will *divert*, or transfer, some of the water of the Missouri River to these areas. North Dakota will then be able to irrigate 100 000 hectares of farm land. (To irrigate means to bring water stored in dams and reservoirs to farm lands.)

More water will also benefit North Dakota's factories. It will help the tourist industry.

The cost of the Garrison Diversion Project will be \$825 million.

#### **Manitoba Says “No” to Garrison Project**

The province of Manitoba is opposed to the project. The project will cause water from the Missouri River to enter the waters of the Red and Souris rivers in Manitoba. Foreign fish, plant and animal life, and pollution from the Missouri River will enter these rivers and may pollute or destroy them. As these rivers flow north into the Hudson Bay basin, it too could be polluted.

This pollution would ruin the fresh-water fishing industry on Lake Winnipeg and Lake Manitoba. The fishing industry earns \$10 million each year for Manitoba. The province's tourist industry would

also be damaged. The drinking water in towns like Portage La Prairie and Souris would be polluted. Wildlife in the area would be harmed by the project.

The Canadian government and the government of Manitoba are trying to stop the project.

#### **USING KEY FACTS**

1. Which parts of North Dakota need more water?
2. Where would this water come from?
3. What does “to irrigate” mean?
4. How much will the Garrison Diversion Project cost?
5. Name two rivers in Manitoba that will be affected by the project.
6. What would happen to these rivers if the project is completed?
7. What industry would be harmed the most if the project is completed?

#### **USING WHAT YOU KNOW**

Find out what types of fish, animals, and birds are found in this area of Manitoba. How will they be harmed by the project?

The class could work in groups to research this topic. You could pool your findings and make a large wall-chart showing all the threatened wildlife. The chart could also be illustrated.



## *In Focus*

### CLEANING UP THE GREAT LAKES

People decide where the borders of countries go. Water does not stop at these borders. Nor does the pollution that is carried in the water.

One Canadian province (Ontario) and nine American states (Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, New York, and Vermont) border the Great Lakes. They share the benefit of all the water in the Great Lakes. They also share the responsibility for the pollution in the lakes.

#### **WHAT CAN GOVERNMENTS DO ABOUT POLLUTION?**

Governments do make laws to control pollution. However, Canadian laws are not the same as American laws. Laws are even different from province to province in Canada, and from state to

state in the United States. Having different water and pollution laws makes finishing the Great Lakes clean-up a problem.

For example, most of the provinces and states that border the Great Lakes agreed to order manufacturers of detergents to cut back the amount of *phosphates* in their products. Phosphates are chemicals that act as a fertilizer on the weeds in the Lakes. They make the weeds grow so fast that they choke all other forms of life. Ohio and Pennsylvania refused to pass such a law.

The International Joint Commission supervises the use of the Great Lakes. The Commission says Canada should spend \$29.5 million and the United States \$76 million each year to finish cleaning up the Great Lakes and to make sure that they stay clean.



*Because of water pollution, many fish die and are washed ashore along the edges of the Great Lakes.*



*Many of Canada's lakes and rivers are dead or dying because of the wastes people and industries are dumping into them.*



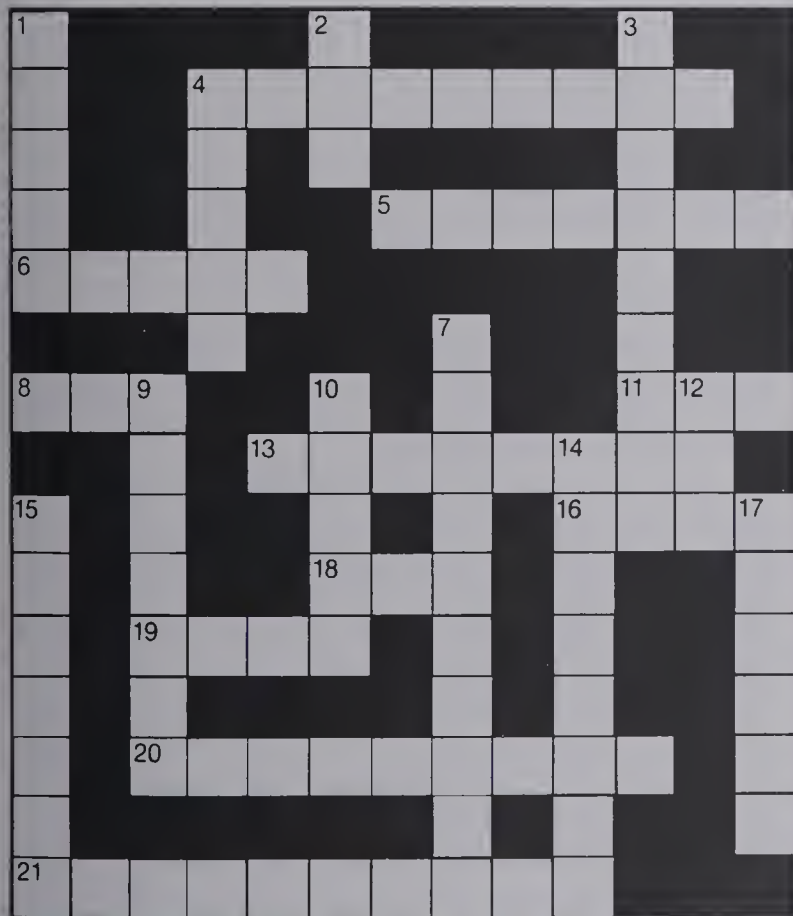


## USING KEY FACTS

1. Which Canadian provinces border the Great Lakes?
2. Which American states border the Great Lakes?
3. What polluting agent makes the weeds in the Great Lakes grow too fast?
4. Which group supervises the use of the Great Lakes?
5. Why could it be difficult for Canadians and Americans to finish cleaning up the Great Lakes?

## USING WHAT YOU KNOW

Try this pollution puzzle. The answers are at the end of the Glossary in the back of the book.



## ACROSS

4. Great Lake State famous for dairy products.
5. Largest Canadian city on the Great Lakes.
6. Iron ore is used to make \_\_\_\_\_
8. International Joint Commission.
11. Great Lakes province (abbreviation).
13. It is almost thirty per cent iron ore.
16. Governments make these to control pollution.

18. When you turn on the \_\_\_\_\_, you get clean water—you hope!
  19. The number of American states on the Great Lakes.
  20. This will make us all dead ducks.
  21. The I.J.C. \_\_\_\_\_ the use of the Great Lakes.
- DOWN

1. Phosphates act as fertilizers to these.
2. The Great Lakes lie between Canada and the \_\_\_\_\_ (abbreviation).
3. A state on Lake Superior.
4. Fish live in this.
7. Weeds love these chemicals.
9. This \_\_\_\_\_ job will cost a lot of money.
10. Factories dump this into the lakes.
12. The state of \_\_\_\_\_ York is on lakes Ontario and Erie.
14. Chicago is in this state.
15. People decide where the \_\_\_\_\_ of countries go.
17. Pumped into the Lakes by cities.

## PROBLEM SOLVING

"I'm afraid the Americans haven't accepted . . . that Canadians have a right to half of the lakes. They are using more than their half of the lakes for their wastes. They seem to be saying 'There are more of us and less of you, so we get a bigger piece of the action.'"

Do you agree with the Canadian official who said this? If so, how do you think Canadians can convince Americans to think differently? If you don't agree, why not? Answer in point form.

# The Southern States

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## Looking at the South

**The South is a region made up of eleven states.** The region stretches from the Carolinas, Georgia, and Florida on the Atlantic coast to the dry plains of western Texas. Farthest south there are Louisiana, Mississippi, and Alabama on the Gulf of Mexico. Oklahoma, Arkansas, Tennessee, and North Carolina are the northernmost states.

**The Mississippi River flows through the Southern states.** It forms part of the boundary lines for several states. More than 250 rivers flow into the Mississippi. The largest branch, the Ohio River, flows in from the east. The largest branches from the west are the Missouri and the Arkansas.

In the spring the Mississippi's waters are often very high. Its branches carry much water from melting snow into it. At times the Mississippi spills over its banks and floods the lowlands. To help prevent floods, the government has built miles of strong walls, or *levees*, along the banks. Dams have been built on some rivers. The dams hold back part of the water. It is stored in reservoirs until it is needed.

The Mississippi is a muddy river. In fact, it is so muddy that it has been given a nickname—"The Big Muddy." Its branches carry soil down mountain slopes and across plains. The giant river carries some soil right down to the Gulf of Mexico.

The Mississippi widens as it flows south. It slows down as it winds through the flat plains along the Gulf of Mexico. At its mouth the Mississippi divides into several branches. The *mouth* of a river is the place where it empties into a large body of water. When the mouth of a river has several branches, it is called a *delta*.

**Broad plains cover much of the Southern region.** The *Atlantic Coastal Plain* stretches all the way south to Florida. In Florida the Atlantic Coastal Plain joins the *Gulf Coastal Plain*. Much of the Gulf Coastal Plain has deep, rich soil.

In some places the Gulf Coastal Plain is low and flat. The water cannot drain easily. These low, wet places are swamps. One huge swamp in the southern-most tip of Florida is called the Everglades.

Plains also cover most of Texas and Oklahoma.

Along the Gulf of Mexico they are a part of the Gulf Coastal Plain. The inland plains are much higher than those along the coast.

**The southern region has mountains and hills.** The Piedmont extends south through North Carolina, South Carolina, Georgia, and west into Alabama.

West of the Piedmont are the Appalachians. Several ranges of mountains stretch through these highlands. On the east are the Blue Ridge Mountains. Farther west are the Great Smokies.

**The Tennessee Valley includes parts of seven states.** It is the area drained by the Tennessee River and its branches.

This large valley gets much rain. Long ago, forests covered the floor of the valley and the nearby hills and mountains. The roots of the trees and shrubs held the soil. Through the years, farmers and town builders chopped down the trees. When the rains fell, the water raced down the slopes. Bad floods damaged farmlands and towns.

The racing water washed away the soil. Such loss of soil is called *erosion*. Only poor crops would grow in the thin soil that was left.

In 1913 the Norris Dam was built to *conserve*, or protect, this valley's rich natural resources. In 1933 the government began building more dams on the rivers of the Tennessee Valley. The Tennessee Valley Authority, or TVA, was in charge of this work.

Today there are about fifty dams. They can store much water. They have prevented many floods. New forests have been planted. Farmers are using ways of farming to prevent erosion. They plough around the hillsides so that rain is trapped in the furrows. This method is called *contour ploughing*.

The TVA dams also supply electric power. It comes from power plants built below the dams. Low-cost power has led to the growth of industry in the Tennessee Valley.

**The Southern states have a generally mild climate.** Warm moist winds blow across these states from the Gulf of Mexico. They help to keep the winters mild.

The northern edge of this region is colder in win-



ter than the lands along the Gulf. Freezing weather may occur as far south as Florida when cold winds sweep south from Canada.

Summers in some of the South are hot and humid. The warm weather begins in the early spring and lasts until late in the fall. This gives the South a long growing season. This growing season and plentiful rains help the people in the South to grow many crops. They can raise cotton, tobacco, sugar cane, rice, and peanuts. The western parts of Texas and Oklahoma, however, get little rain. Cattle and sheep are raised on these lands.

### **Agriculture is a Leading Industry**

**Cotton is the main crop in the Southern region.** So much cotton is grown in the South that a part of the area is known as the Cotton Belt. Texas grows more cotton than any other state. But cotton is the chief money crop all over the Cotton Belt.

The Cotton Belt does not include Florida or certain lowlands along the Gulf coast. They get too much rain to grow cotton. Nor is cotton grown in the drier parts of west Texas.

**What other major crops are grown in the South?** Georgia and South Carolina are famous for peaches. Peanuts and pecans are raised in many sections of the Cotton Belt. But Georgia raises more of these than any other state does.

Florida and southwest Texas are noted for grapefruit and oranges. These fruits are called citrus fruits.

Rice is raised on the wet lowlands of the Mississippi Delta and the Gulf coast of Louisiana and Texas. Some is also planted farther north in Arkansas.

Louisiana has huge fields of sugar cane. This area is often called the Sugar Bowl of the South. Some sugar cane is raised in Florida.

Tobacco is the main crop in a large part of North Carolina. Other important crops include corn, soybeans, watermelons, and sweet potatoes.

The Southern states raise many vegetables. Because of the mild climate, vegetables can be grown in the South for most of the year. Farmers in North Carolina, South Carolina, Georgia, Florida, and Texas grow winter vegetables to sell in the northern states and Canada.

The South has a lot of mixed farming. Dairy farming is important near the cities. Large wheat farms



*Citrus fruit (above) and rice (below) are important cash crops. the South. Both crops need a lot of water to grow. Irrigation provides the water. In what areas of Canada do crops require irrigation?*





spread across the plains of Oklahoma and northern Texas.

Many beef cattle are raised in western Texas and Oklahoma. These western plains are too dry to be farmed without irrigation, but their grass feeds large herds of cattle.

### Other Natural Resources of the South

Lumbering is another major industry in the South. The South supplies more than a quarter of the lumber used in the United States. Pine trees are raised as a crop. They are grown on hilly lands that can't be farmed. The South has a mild climate, a long growing season, and heavy rainfall. Pine trees grow rapidly under these conditions.

Loggers are busy winter and summer cutting down trees. Many logs go to sawmills to be made into lumber. Hardwoods, such as oak and maple, are used for making furniture and for woodwork in buildings.

Softwoods, such as pine, are used for building. Also, many pine logs are ground into pulpwood for making paper and rayon goods. Rayon is a textile.

Many pine trees are tapped for their sticky resin, or sap. The resin oozes out from cuts made in the tree trunk. Resin is used to make paints, varnishes, turpentine, linoleum, and some soaps.

Some southern workers earn their livings by fishing. Oysters and shrimps are plentiful in the warm, shallow coastal waters of the Gulf of Mexico. Fishing boats bring in menhaden, mackerel, flounder, sea trout, and red snapper. Menhaden are caught mainly for their oil. The oil is used in soap and paints.

Thousands of people work in the South's oil industry. Today the South has several large oil fields. The Gulf Coast Field goes from the coast of Texas into Louisiana. Another is the East Texas Field. A third, the Mid-Continent Field, runs from northern Texas through Oklahoma into Kansas. Another is under water off the coast. It is called the Tidelands Field.

*Large petroleum deposits lie off the coast of Texas and Louisiana. Portable drilling platforms are used to bring the oil to the surface. Off the coast of which Canadian provinces would you find off-shore drilling rigs?*







Oil is found deep in the ground. To get to it, workers drill holes deep into the earth. Tall derricks hold the drilling machinery.

Crude oil is pumped into huge storage tanks. Then it is sent to refineries. Much goes by pipeline. Some is hauled by truck or railroad tank cars. Some is shipped in tankers. At the refineries the crude oil is heated. This separates it into gasoline, kerosene, fuel oil, lubricating oil, and other useful products.

Oil is used as fuel for autos, trucks, buses, airplanes, and farm equipment. Some is turned into heating oil. Some is used for making electricity. Oil is also used to make synthetic fabrics and many plastic products.

Natural gas is found in Texas, Louisiana, and Oklahoma. It is used for cooking and for heating

homes and other buildings. Natural gas is used as the chief fuel in some factories. In many oil fields, natural gas comes from the wells along with petroleum. In some places it is found by itself.

**Tennessee and Georgia have quarries of marble and granite.** A quarry is a large pit, or hole in the earth, from which stone is taken. Marble and granite, which are taken from quarries, are used in buildings.

Florida and Tennessee have rich deposits of phosphate, a mineral used in making fertilizer.

Sulphur is mined in Texas and Louisiana. It is a yellow material found far under the ground. It is needed to make paper, matches, tires, and many other products.

In Arkansas a clay called *bauxite* is found. This is

the ore from which aluminum is made. Aluminum is used for making pots and pans, auto and airplane parts, and many other useful things.

Alabama has deposits of coal, iron ore, and limestone.

### **Manufacturing, Trade, and Cities**

**Manufacturing is a main industry in the South.** The farms, forests, and mines of this region provide many raw materials. There is plenty of electric power to run the factories. The South also has the skilled workers that the factories need.

Southern mills and factories produce textiles, clothing, paper, and furniture. Aluminum, iron, and metal articles are turned out. Dozens of products are made from cottonseed oil, soybeans, and peanuts. Large amounts of chemical products are produced.

The busy farms and factories produce goods that must be sold, or traded. Trade leads to the growth of cities.

**Birmingham and Atlanta are large cities in the southeast.** Birmingham is a big iron and steel centre. It is located near coal, iron ore, and limestone deposits. Birmingham is also noted for its colleges and a famous museum.

Atlanta is one of the largest cities in the South. Metropolitan Atlanta has more than a million people. Atlanta is a leading transportation centre. This has helped its mills and factories grow. Many textiles and other products are made here.

Memphis is the largest city in Tennessee. This busy Mississippi River port has many industries. Some of them make cottonseed products, textiles, machinery, and chemicals.

Oak Ridge is a young city in the Tennessee Valley. It has laboratories for developing peaceful uses of atomic power. Many people are employed in these laboratories.

**Houston is a busy inland seaport in Texas.** A ship channel connects Houston with the Gulf of Mexico. The city's fine location for shipping has helped it to grow very fast.

Houston is a business and shipping centre for cotton, livestock, wheat, and oil. All these things are produced in the state of Texas. They are taken to Houston to be shipped. Metropolitan Houston has many kinds of manufacturing industries.

**Many Texas coastal cities share the "Golden**

**Crescent."** The crescent is shaped like a new moon. This "Golden Crescent" is about 590 km long. It runs along the state's coast from Beaumont to Brownsville.

Once much land on this coast was used to raise sugar and rice. Today much of this same land is used by oil refineries, chemical plants, and factories. This long, curved area is so rich with industry that it is called the "Golden Crescent."

**Dallas and Fort Worth are two other important Texas cities.** In Dallas the branches of large business firms employ many workers.

Fort Worth is a leading business centre for oil, grain, and livestock. Meat packers and farmers gather here to buy and sell cattle.

**New Orleans, in Louisiana, is another of the South's many busy ports.** It has long stretches of wharves and warehouses. Ships bring in goods such as coffee and bananas. They carry away goods such as corn, wheat, cotton, gasoline, and steel products.

New Orleans is a major manufacturing centre. Rice and sugar are prepared for market. Oil refineries and giant chemical plants are located near New Orleans.

The South has many other busy ports. On or near the Gulf of Mexico are Corpus Christi, Port Arthur, Galveston, Mobile, and Tampa. Charleston, Savannah, and Jacksonville are thriving ports along the Atlantic coast.

### **The Tourist Business**

Some cities in the South attract many tourists. Miami, Florida, is one of the most famous winter resorts in the United States. Cape Canaveral, the site of many rocket launchings, draws many visitors all year round.

New Orleans is widely known for its old French quarter. There are many interesting homes and restaurants there. Mardi Gras is a festival held every year in late winter in New Orleans. In South Carolina, Charleston's handsome old homes and fine gardens draw visitors.

One unusual area in the South is the Florida Keys. This is a series of tiny islands in south Florida. A highway with many bridges connects these islands. Key West is the most southerly point in the United States.





*New Orleans, at the mouth of the Mississippi, has long been an important shipping and trading centre. The floating structure in the left centre of the photo is a dredging platform. Why does the Mississippi River require constant dredging?*



*Houses in Charleston, South Carolina.*

## Key Skills Practise

The words in List A describe places or things that are mentioned in this chapter. Write the numbers of these items in a column on your paper. Beside each number write the name of the item from List B.

### List A

1. Strong walls to hold back a river
2. Low lands along the Gulf of Mexico
3. A scenic playground in the Appalachians
4. A large Florida swampland
5. An iron and steel centre
6. Texas's new coastal industrial area
7. A main industry in western Texas
8. Trees tapped for resin
9. An important crop in southern and central Louisiana
10. Grain grown in flooded fields
11. Ore used in making aluminum

### List B

Birmingham	bauxite
Great Smoky Mountains National Park	soybeans
Everglades	maple
levees	rice
hickory	sugar cane
Gulf Coastal Plain	peanuts
pine	Golden Crescent
	raising cattle

## Learning New Skills

1. Draw the Mississippi River system on an outline map of North America. Show its main tributaries. Find a river system in Canada that drains a large area. Mark it on your map.
2. A) Trace the map below. In the correct places, print the names of the eleven Southern states.

- B) There are lines on the map to help you locate the Atlantic Coastal Plain and the Gulf Coastal Plain. Color these coastal plains light green. Color the key to match.
- C) Which is the largest of the Southern states? Color it yellow.
- D) Which state is a peninsula? Color it purple.
- E) Color and name the states located on the Gulf of Mexico.
- F) Draw a circle on your map to show the mouth of the Mississippi River.
- G) Color and name the states which border on the Atlantic Ocean.
- H) Write the name of each state capital beside the star that shows its location.
- I) Write the names of the Arkansas River and the Tennessee River in their correct locations.

4. Turn to the map of the Southern states on pages 50 and 51 of your book. Use the key to help you you decide which of these cities is larger.

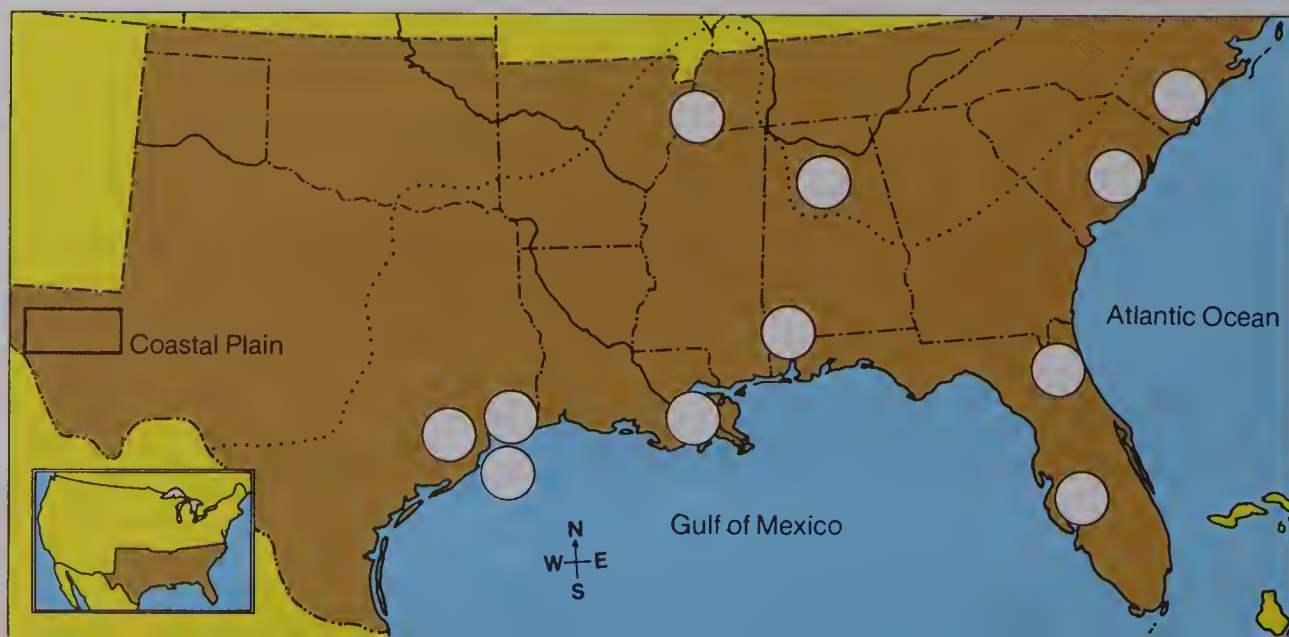
- A) Houston, Texas, or Memphis, Tennessee.
- B) Fort Worth, Texas, or New Orleans, Louisiana.
- C) Birmingham, Alabama, or Augusta, Georgia.
- D) Oak Ridge, Tennessee, or Tulsa, Oklahoma.
- E) Miami, Florida, or Pine Bluff, Arkansas.
- F) Knoxville, Tennessee, or Orlando, Florida.
- G) Charleston, South Carolina, or Dallas, Texas.

5. Name the largest city in the South.

## Using What You Know

1. What does TVA stand for?
2. List three purposes of a dam.
3. In your own words, explain the following terms:  
A) erosion B) conserve C) contour ploughing

Southern States





# The Rocky Mountain States

---

**The Rocky Mountain states are just west of the Central states.** They are bordered on the north by Canada and on the south by Mexico. The Rocky Mountain states of Idaho, Montana, Wyoming, Colorado, Utah, and New Mexico, cover a distance of 1900 km.

**Four Rocky Mountain states share the Great Plains.** These plains go from the Central states into Montana, Wyoming, Colorado, and New Mexico.

These plains are covered with short grass except where they have been ploughed. They rise as they go west to the mountains.

The snow-capped Rockies rise high above the Great Plains. They extend all the way through this region. The Rockies have many mountain ranges.

**West of the Rocky Mountains lies plateau country.** A plateau is a highland that is usually not as level as a plain. The Rocky Mountain region covers a part of the huge Columbia and Colorado plateaus. These plateaus have rolling lands, deep valleys, and ranges of mountains.

Part of the Columbia Plateau is in Idaho. The Colorado Plateau goes through parts of Colorado, Utah, and New Mexico.

Two Rocky Mountain states share the Great Basin. The Great Basin extends through western Utah and north into Idaho. It has mountains, valleys, and large deserts.

The Great Basin also has sloping sides. Since higher lands are all around its floor, water can't run out. Streams that flow into the Great Basin do not reach the ocean.

If it can't reach the ocean, where does all this water go? Some of it dries up in the hot summer sunshine. Some sinks into the ground. And some flows into Great Salt Lake.

**Great Salt Lake is in Utah on the eastern side of the Great Basin.** It is five or six times more salty than the ocean. This is because all fresh water has a little salt in it. This is true of the streams that feed the lake. As the lake water evaporates in the hot sun, the salt is left behind. Because no streams flow out of the lake, the salt is never washed away.

**Some large rivers begin in the Rocky Mountain region.** Among them are the Colorado, Missouri, Arkansas, and Snake rivers and the Rio Grande.

*The Great Plains in Colorado slope gently towards the Rocky Mountains. What areas in Canada have a similar landscape?*









These rivers are far more valuable than all the gold and silver found in this region. Dams on the rivers hold back much water. This water is then used by towns and cities and for irrigation of farms. Dams also provide water power to make electricity.

**Vast areas in the Rocky Mountain region are dry.** This is because the clouds from the Pacific drop most of their rain before they get to this area. Only a little rain falls on the Great Basin and most of the plateau lands.

**Climate is varied in the Rocky Mountain states.** The northern lands often have long, cold winters. Icy winds sweep across the plateaus and plains. They bring blinding blizzards.

The high mountains stay very cold from early fall to late spring. In many places they are buried under heavy snows. When warm weather comes, most of the snow melts. But some peaks have snow on them all year.

The mountains have moderate, short summers with cooler weather than the lower lands nearby. In some areas of the Rocky Mountain states summer temperatures may climb to 38°C. It can be just as hot on the plains and plateaus in the north as it is in the south. Cooling showers come only once in a while.

## Farming and Ranching

Some farmers carry on dry farming on the plains. Dry farming tries to make use of all the rain and snow that falls. Farmers plant only one part of their land each year. The rest of the fields are left unplanted, or *fallow*. The unplanted fields are cultivated. This loosens the soil so that rain can sink in. It also kills the weeds that use up moisture. Fallow fields are ploughed so the furrows can catch and save the water. The moisture stored in the ground will help the next crop. In dry farming, only crops that can grow well with little rain are raised. Wheat is the main crop.

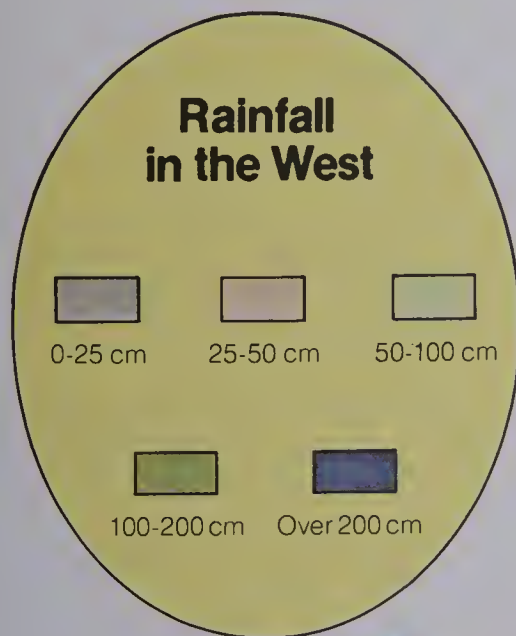
Irrigated farming is also important in this region. Rivers flowing down the mountains provide water for irrigation. This water is stored in reservoirs behind dams. Canals carry the water from the reservoirs to the farmlands.

Potatoes and peas are grown in Idaho and Utah. One part of Colorado is known for its melons.

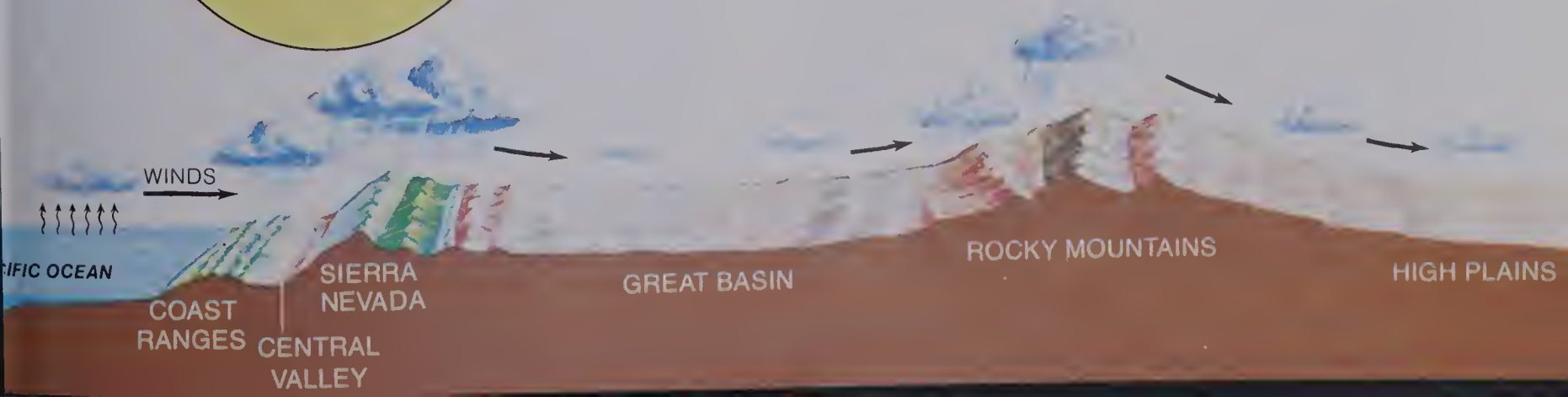
Cotton is grown in New Mexico and Arizona.

Several states grow sugar beets. The sugar beet is related to the red beets we eat. But the sugar beet has a whitish root.

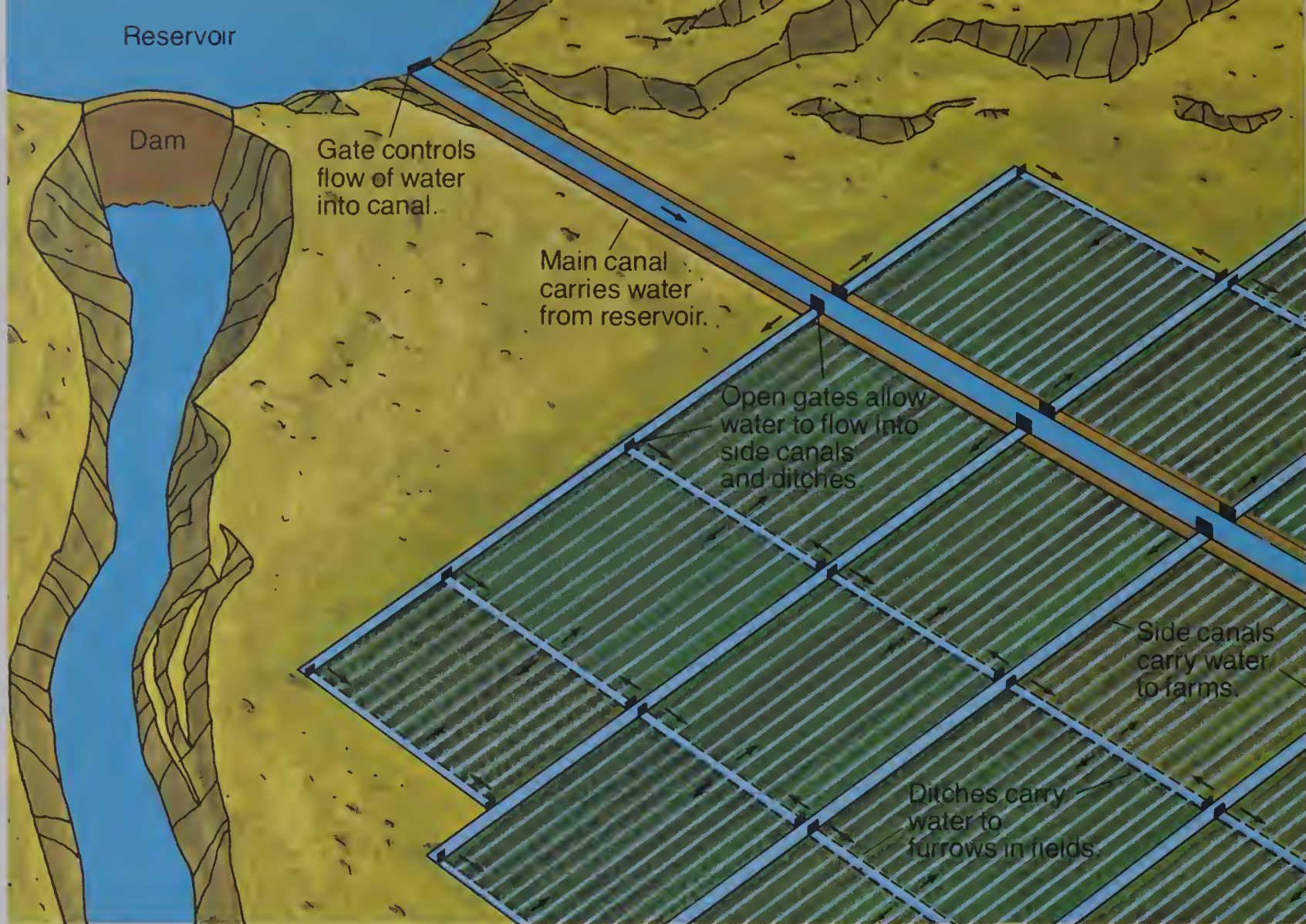
Sugar beets are planted from seeds. They are ready to harvest in late summer or early fall. This work is



Heavy rain clouds blow inland from the Pacific Ocean. The Coast Range and the high Sierra Nevada steal much of this moisture. As the clouds rise to cross the mountains, most of the moisture is dropped on the western side of these mountains. By the time the clouds reach the eastern side of the mountains, very little moisture is left. For this reason the Great Basin is a dry land. For the same reason much of the West is a dry land.







*Through irrigation, desert land is turned into productive farmland.*

done by a machine. It loosens the soil, pulls the beets, and cuts off their tops. Then it dumps them onto a moving belt that carries them to a truck. The beets are hauled to a sugar refinery.

At the refinery a large machine washes and cleans the beets. They are sliced in thin strips. The strips are treated to remove the "juice." It is boiled, made pure, and finally comes out as sugar.

**Farmers raise alfalfa in each of the Rocky Mountain states.** It is a main crop in Idaho. Alfalfa is an important food for livestock and a good soil builder. It helps to put certain plant foods back into the soil. Alfalfa can grow in quite dry soil. Its roots grow as far as 7.6 metres into the ground. It is better at finding water than short-rooted plants are.

**Many ranchers in this region raise beef cattle.** Cattle ranches in the Rocky Mountain states are large. One ranch may have several hundred hectares. The grass is so thin that a number of hectares is needed for each cow.

**Some ranchers own large flocks of sheep.** Sheep are raised for meat and for wool. Sheep can live

where the land is too dry or rough to raise cattle. They can feed on shorter and poorer grass.

Each flock is tended by a sheep herder and several dogs. The herder may live in a truck-drawn "covered wagon," or trailer, and move from place to place. In the early summer the herder may drive the animals to mountain meadows. Here they find greener grass and more water than on the hot, dry plains. When fall comes, the sheep are driven back to the ranches.

### **Mining and Lumbering**

**Miners opened up part of the Rocky Mountain region.** Gold and silver were found in present-day Colorado, Montana, and Idaho about a hundred years ago.

Many fortune hunters came to the new treasure fields. Mining towns sprang up overnight. They grew so fast that they were called boom towns.

When the supply of gold and silver ran out people moved away. The empty towns are called ghost towns.

**Today many different minerals are mined in this**



**region.** Gold and silver are still among them. The largest silver mine in the United States is in Idaho. The main minerals mined today, however, are uranium and coal.

Some miners in Utah and Montana work in the copper mines. Utah has a giant open-pit copper mine.

Butte, Montana, is the centre of another copper-mining area. The copper is blasted from rock deep in the earth beneath the city. The ore is hauled to the surface by small electric cars. It is taken to a smelter to be melted and refined.

Zinc is also produced near Butte. It is a bluish-white metal that has many uses. It is melted with copper to make brass. A thin coat of zinc is often used on other metals to protect them from rust.

Lead is mined in Idaho and Utah. Lead is a soft metal but a very useful one. It is used to cover electric cables. Because radiation cannot pass through lead, it is used for protection from X rays and uranium. Leadville, Colorado, was once a lead-mining centre. Now, the world's largest molybdenum mine is near Leadville.

Molybdenum is a "new" mineral. It is used to make the hard, tough steel needed for cutting tools as well as in airplane motors.

Uranium is mined in Colorado and some other Rocky Mountain states. It is used to produce atomic energy.

New Mexico, Wyoming, Colorado, Montana, and Utah have important oil fields.

## **Cities in the Rocky Mountain States**

**The Rocky Mountain region is thinly populated.** One can travel for many kilometres and not see a town. The towns and cities are trading centres. They serve the farms, ranches, and mines near them. Some have become busy manufacturing centres. Their factories and mills change crops, minerals, and other raw materials into useful products.

**Denver is the largest city in the Rocky Mountain region.** It is in the heart of Colorado "where the mountains meet the plains." It is the capital of Colorado. Denver is called the "Mile High City" because it is exactly one mile above sea level.

Denver is one of the leading cattle and sheep markets of the world. Meat animals from the Great

Plains are shipped to its huge stockyards. Some people work in its packing plants getting meat ready for market. Some earn a living in the flour mills and beet-sugar refineries. Others work in factories that produce leather goods or machinery. A lot of mining business goes on here. The tourist business is important, too.

This city is the gateway to other parts of the Rocky Mountain region and to the states farther west. Railways, highways, and airways connect it with other cities such as Salt Lake City just west of the Rocky Mountains.

**Salt Lake City is the second largest city in the region.** It is the capital of Utah. Salt Lake City spreads over a wide, dry basin at the foot of high mountains. Water for the city and nearby farms comes from these snow-capped mountains.

Salt Lake City was settled by a religious group known as the Mormons. Today the city is the spiritual home of the Mormon Church, or the Church of Jesus Christ of Latter Day Saints.

Salt Lake City was called "The Crossroads of the West" during the days of the pioneers. The main trails to the Far West led through or near it. Today, railroads and highways follow these same routes.

The city is the chief trading centre for kilometres around. It has canneries, dairies, flour mills, and beet-sugar refineries. Some plants prepare salt for market. As in Denver, the main offices of some mining companies are located in Salt Lake City.

**Other cities serve the Rocky Mountain region.** Pueblo, Colorado, is widely known for its steel mills. Cheyenne is a transportation centre and Wyoming's capital. Helena, Montana's capital, is a busy trading centre for mines and farms.

Albuquerque is New Mexico's largest city. It was started by the Spanish in 1706. Many Spanish buildings can still be seen in old sections of the city. Today Albuquerque is an important centre of trade and industry.

## **Famous Natural Wonders**

**Beautiful wonderlands are scattered through this region.** Some of these wonderlands are national parks. Yellowstone is the oldest national park.

At Yellowstone, great fountains of hot water burst out of the earth. They are called geysers. There are many sights besides the amazing geysers. One is the

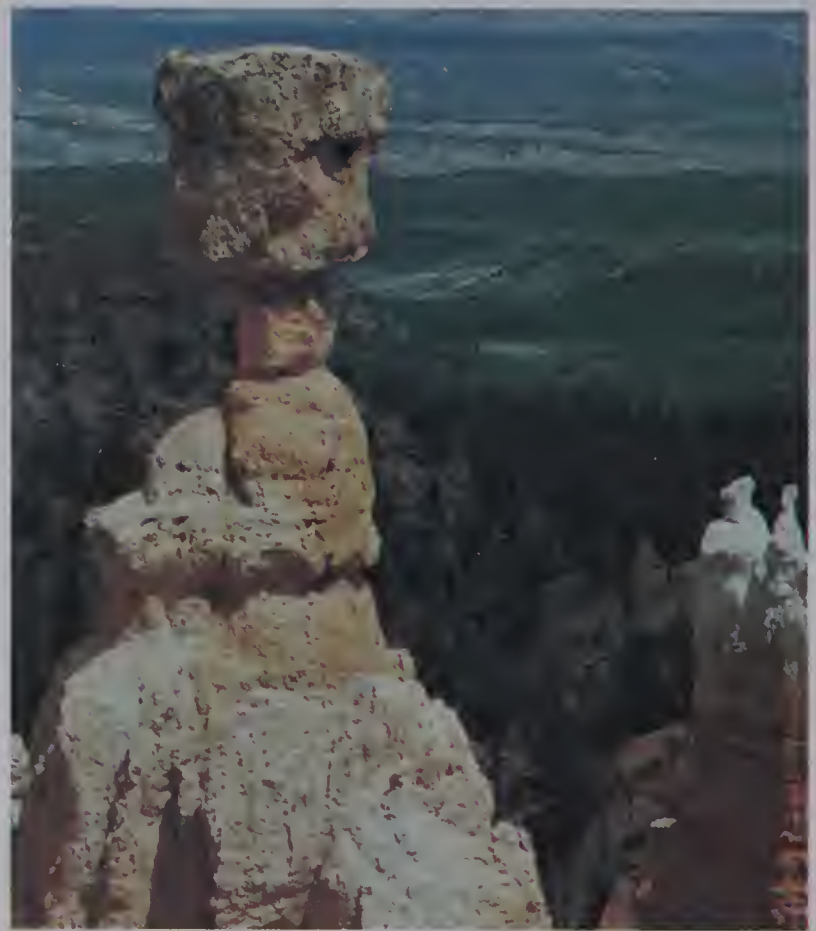
Grand Canyon of the Yellowstone. It was carved out by a river that now flows hundreds of metres below.

**Several other national parks are in the Rockies.** In Wyoming there is Grand Teton with its sharp, high peaks.

Glacier National Park is in the mountains of western Montana on the border with Canada. Together with Waterton Lakes National Park in Alberta, this park is called the Waterton-Glacier International Peace Park. Much snow falls in the mountains of this park. It collects year after year, layer upon layer. Some of it never melts. The lower layers have changed to ice. These huge masses of ice are *glaciers*. They creep ever so slowly down the mountain slopes. Some of the snow melts and runs into streams and lakes.

Rocky Mountain National Park is in Colorado. It has sixty-five peaks that are more than 3040 m high. The tallest have snow on them all summer. This park is dotted with deep sparkling lakes and threaded with silvery streams. Camping areas and kilometres of trails attract many visitors.

**Bryce Canyon and Zion Canyon are in south-**



*The Rocky Mountain states have many natural wonders such as the Grand Teton Mountains in Wyoming (below) and Bryce Canyon in Utah (above).*





**western Utah.** Bryce Canyon is filled with bright, strangely shaped rocks. Some rise many metres above the floor of the canyon.

Zion Canyon is also full of color. A river has carved this deep, narrow canyon, leaving high walls and towers of stone.

**Southwestern New Mexico** has **Carlsbad Caverns National Park**. It is a chain of huge caves. Each one is like a large room. Amazing stone “icicles,” called stalactites, hang from the ceilings of these caves. Other strange column-like rocks, called stalagmites, rise from the floors.

### Key Skills Practise

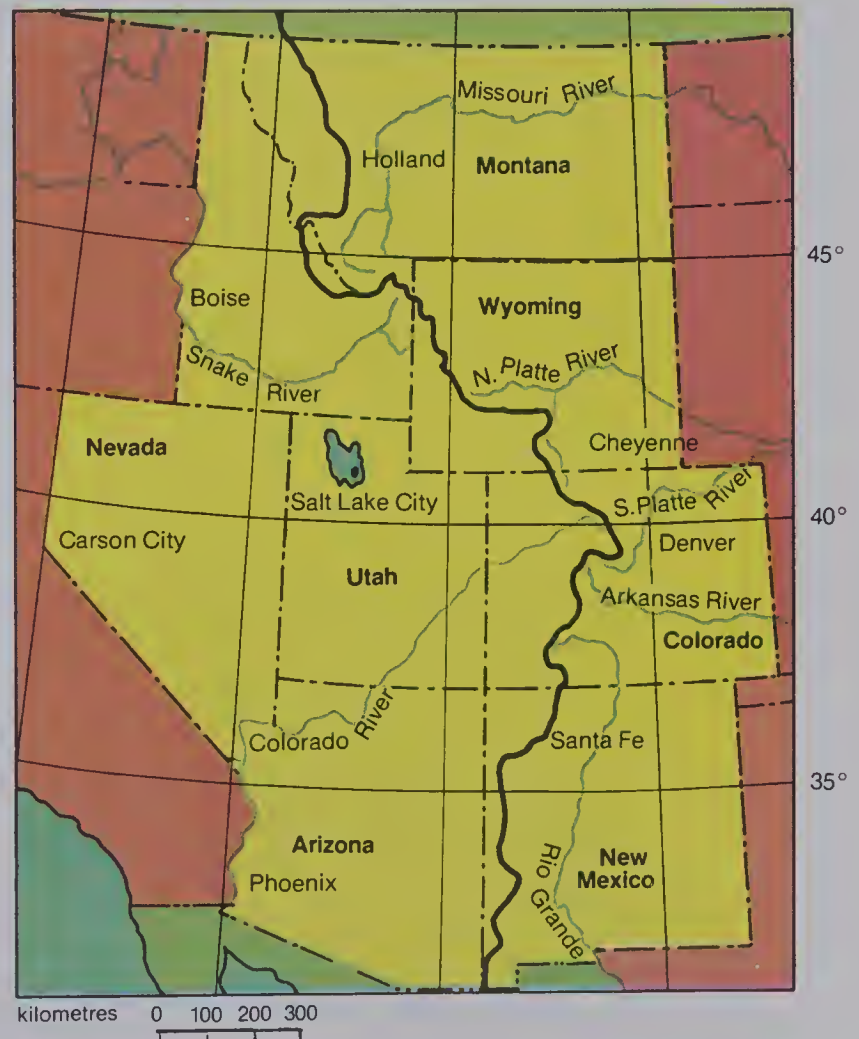
1. Name the Rocky Mountain states and provinces.
2. Why are rivers so important to these regions? How are they used?
3. What are the main industries in the Rocky Mountain states and provinces?
4. List the similarities between the region where you live and the Rocky Mountain states.
5. Choose one Rocky Mountain state. Compare its natural resources and the occupations of its people with those in the province where you live.

### Fun with Maps and Graphs

Use the map on page 56 to help you answer these questions:

1. Which place has the most people, Colorado Springs or Billings?
2. How far is it from Great Falls to Helena?
3. What is the capital of Wyoming?
4. In which state would you find Bryce Canyon National Park?
5. Which national park do Canada and the Rocky Mountain states share?
6. Why is the Rocky Mountain region thinly populated?
7. Study the small map of the Rocky Mountain states. Which of the following sentences is true?
  - A) The Arkansas River flows west.
  - B) The Great Divide separates Montana from Canada, North Dakota, and South Dakota.
  - C) The mouth of the Colorado River is in the Rocky Mountains.
  - D) Most of the state boundaries in the mountain states are rivers.
  - E) The northern boundary of Wyoming is the 45° latitude line.
  - F) The Snake River and the Missouri River flow in opposite directions.
  - G) The most mountainous part of Arizona is the southwestern part.

- H) At least five rivers have their sources in the mountains of Colorado.
- I) The mountain states region is over 1360 km wide at its widest part.
- J) Boise is on the 40° latitude line.



## Using What You Know

On paper, write the correct ending for each of the following sentences.

1. The Rocky Mountain region lies just west of (New England.) (the Central states.) (the Middle Atlantic states.)
2. Dry farming is used to raise (wheat.) (corn.) (sugar cane.)
3. A main industry in this region is (fishing.) (stock raising.) (shipping.)
4. Many ranches raise large numbers of (horses.) (dairy cattle.) (beef cattle.)

## Learning about East-West Lines, or Latitude

On page 42 you learned how to use letters and numbers to locate places on a map. Many maps have north-south lines and east-west lines.

East-west lines run east to west on a globe or map. Look at the picture of the globe. Find the equator. It is a line from east to west on a globe or map of the earth. It shows the place around the earth that is halfway between the North Pole and the South Pole. Now turn to the map of the United States on pages 10-11. Notice the east-west lines. Find the east-west line that runs south of New York City. Is Denver just north or just south of an east-west line shown on the map? What city in Nevada is located almost on an east-west line?

The line that runs through northern Florida is numbered "30°." The symbol ° means degrees. Salt Lake City, Utah, is a little north of the east-west line numbered 40°. Find Salt Lake City. An east-west line is called a *line of latitude*.





# The Pacific Northwest

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## The Northwest

**Oregon, Washington, and Alaska are the states of the Northwest.** Alaska is the largest state in the United States. It is about one-fifth the size of the rest of the country.

**Oregon, Washington, and Alaska have kilometres of seacoast.** Oregon's rugged Pacific coast is famous for its beauty. Washington's western coast also faces the Pacific. Its northern shores look out on a long strait. A *strait* is a narrow channel of water that connects two larger bodies of water. This waterway, the Juan de Fuca Strait, connects the Pacific Ocean to Puget Sound and separates the state of Washington from Vancouver Island.

Alaska has a very long seacoast, since the state is on a giant peninsula. The icy Arctic Ocean lies north of this huge land. To the west are the Bering Strait and the Bering Sea. These were named for Vitus Berings, a Danish sea captain. He claimed Alaska for Russia, the country that had hired him. Russia sold Alaska to the United States, and, in

1867, it became a territory of the United States.

Southern Alaska has a long tongue of land known as the Alaskan Peninsula. It leads southwestward to the Aleutian Islands. This chain of islands curves across the Pacific for more than 1600 km.

Southeastern Alaska is known as the Panhandle. Its ragged coastline has many inlets.

**Washington and Oregon share the Coast Ranges.** These are chains of hills and mountains that extend along the Pacific.

**East of the Coast Ranges are fertile lowlands and the Cascades.** The Cascades are high mountains that usually have long, cold winters. In places, the snow may pile up about 10 m.

The tallest peak in the Cascades, Mount Rainier, is in Washington. Its thick cloak of snow and glaciers makes it look like a huge frosted cake. This grand peak is in Mount Rainier National Park.

*Olympic National Park in Washington.*









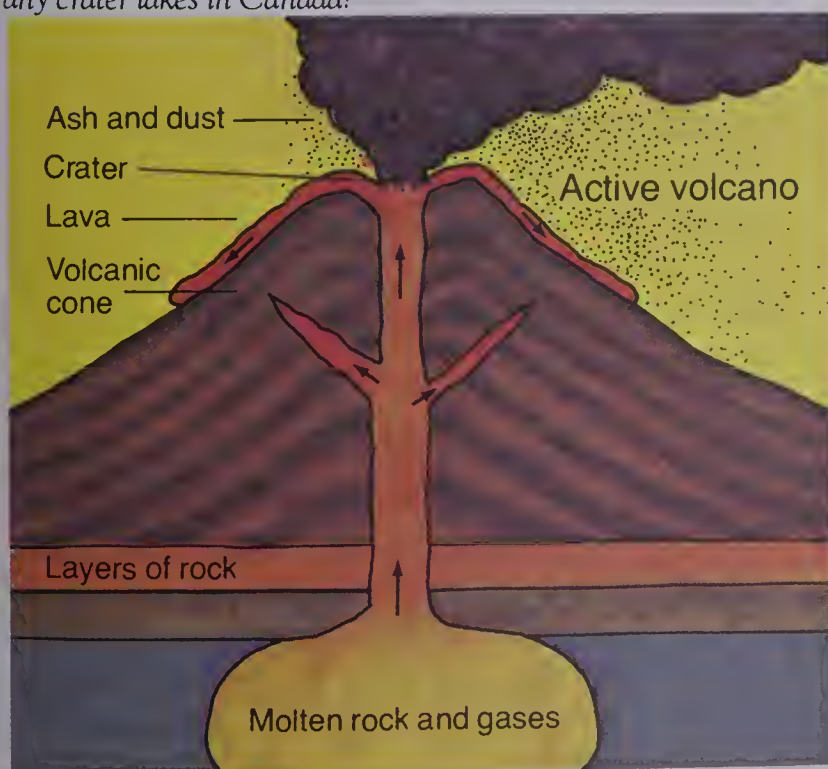
Many peaks in the Cascades were formed by volcanoes. Mount Rainier and Mount Hood, Oregon's highest peak, are volcanoes. A *volcano* is an opening in the earth's surface. Steam, ashes, and lava are forced out of it. *Lava* is rock that has been melted into red-hot liquid by heat deep in the earth.

When a volcano is pushing out materials, it is *erupting*. It may pour out so much lava that it builds up a high mountain.

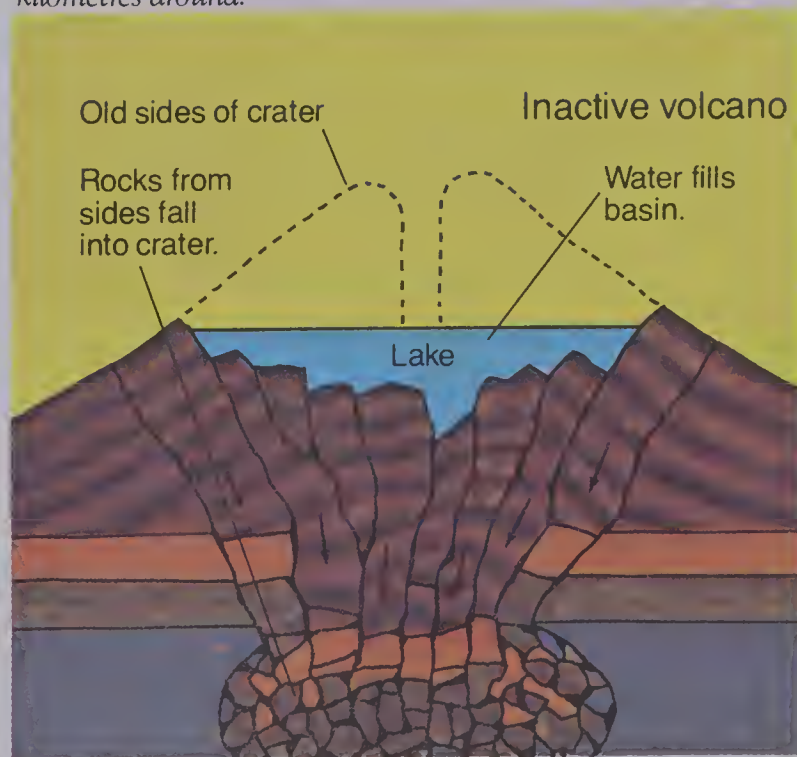
Volcanoes that erupt are *active* volcanoes. Mount Rainier and Mount Hood are quiet now. They have not been active for a long, long time. However, some volcanoes in the Cascades are very active. During the spring and summer of 1980, Mount St. Helens erupted. Hot lava and steam poured down the sides of the mountain, killing people, plants, and animals. Ash fell like rain over a huge area of the western United States and Canada. People were forced to leave their homes. Small mountain resorts were destroyed. Scientists are now watching Mount Baker in Washington. This volcanic mountain has been releasing steam. It may also erupt some day.

The Cascades in southern Oregon are also volcanic. Beautiful Crater Lake is at the top of one quiet volcano. Many ages ago this volcano caved in. This left a giant bowl-like crater 9.6 km across.

Sides of inactive volcanoes often crumble and fall into the crater. If water fills the crater basin, a lake is formed. Are there any crater lakes in Canada?



In 1980, Mount St. Helens erupted in Washington. The column of steam, gas, and lava from the eruption was thrown many kilometres into the air. Ash covered the land for kilometres around.



Gradually it filled with water, to form Crater Lake.

Crater Lake from an airplane looks like a large blue jewel. Around the lake, reddish lava cliffs rise 1600 m above the water. It is part of Crater Lake National Park.

**The Columbia Plateau begins east of the Cascades.** It covers much of eastern Washington and Oregon. Only a little rain falls on this rolling, sun-baked land.

**The Columbia is the most important river in the Northwest.** It tumbles swiftly down mountains to the plateau which bears its name. Then it zigzags west and south. Just after the Snake River joins it, the Columbia flows westward. From then on, it marks the boundary between Washington and Oregon. It rushes down the scenic canyon it has made through the Cascades to empty into the Pacific.

In the past the Columbia caused bad floods. But now dams control its flow. Grand Coulee is the largest dam on the Columbia. It holds back a lake 241 km long. It provides water for irrigating many farms. From the dam, electric power goes to plants and homes near and far.

**Mountains cover more than one-third of Alaska.** Glaciers fill the high valleys of the mountains on the coast. The islands off this coast are the tops of mountains resting in the sea.

The long, narrow Alaska Peninsula has a range of mountains, part of the Western Cordillera, with some active volcanoes.

Mount McKinley is the highest peak in the Alaska Range. It is also the highest mountain in North America. It soars to a height of 6190 m. This is 6.4 km above sea level.

**Alaska also has valleys, flat lands, and low hills.** North of the Brooks Range are rolling uplands and flat coastal plains. The Arctic Coastal Plain lies north of the Arctic Circle. Here, the very cold winter lasts about nine months.

Much of the land is *tundra*, or frozen plain, where no trees grow. The tundra is frozen solid below the surface. It thaws a bit in summer but not enough for trees to thrive. Grasses, moss, and wildflowers can grow here. Through the Yukon Plateau flows Alaska's largest river, the Yukon. It begins in Canada. During the summer the Yukon is a useful waterway for boats that deliver supplies to villages. The Yukon is frozen during the cold winters.

## Climate in the Pacific Northwest

**The Northwest states have a range of climates.** The Alaskan tundra has the coldest winters. The sun shines very little during midwinter. For about two months, days are almost as dark as nights.

Summers in the far north are short but sunny. In midsummer the sun shines both day and night.

Fairbanks has long hours of summer daylight. People here greet the longest day of the year, June 21, with a baseball game. It is played at midnight with no lights.

Southeastern Alaska has a climate much like that in coastal British Columbia, western Oregon, and Washington. Summers are most often cool with some showers and fog. The winters, except in the highlands, are mild. Almost no snow falls.

How can the winters be so mild in Alaska? The climate of the Pacific Northwest is moderated by the Pacific Ocean. The ocean water stays about the same temperature all year long. Winds blowing from the ocean cool these lands in summer and warm them in winter. The mountain ranges also play a part. They shut out the icy winds that sweep down from the Arctic.

The areas west of the mountains have rainy winters. In fact, people in some places keep raincoats handy about two-thirds of the year.

East of the Cascades little rain falls on the plateau lands. These inland areas have winter temperatures that dip far below freezing. They are too far inland for ocean breezes to help. The mountains cut off the ocean breezes.

## Farming and Stock Raising

**Mixed farming is carried on in Oregon and Washington.** Huge amounts of string beans and other vegetables are grown. Some farmers raise daffodil, gladiolus, and iris bulbs for sale. Many kinds of fruit are raised. Berry farms grow strawberries, loganberries, blackberries, and raspberries. Southern Oregon has large crops of cherries and pears.

Irrigation has turned some dry valleys of eastern Washington into fruit-growing areas. Apples are the main crop. Washington grows about one-quarter of the apples eaten in the United States.

**Dairying is one of the main industries near the coast.** Cattle can graze in green pastures all the year round because of the rainy climate and mild winters.





*Wood chips are unloaded at an Oregon paper mill.*

**Wheat and other grains are raised on the Columbia Plateau.** The plateau gets only a little rain. So wheat and other grains are grown by dry farming. Wheat is Washington's largest crop.

**Eastern Oregon and Washington have big cattle and sheep ranches.** They spread over thousands of hectares.

**Alaska has some farms, chiefly in the Matanuska Valley.** Some dairy cattle are raised. They supply milk and cream for the city of Anchorage not far away. Farmers grow oats, peas, cabbages, potatoes, and strawberries.

The growing season this far north is very short. But summer days are warm and provide about twenty hours of daylight. Plants shoot up fast, and the crops ripen quickly. Some of the largest vegetables in the world are grown here.

### **Lumbering in the Northwest**

**Lumbering is a main industry in the Northwest.** Oregon and Washington are among the leading lumber-producing states.

Most of the trees are evergreens or softwoods. They keep their thin, needle-shaped "leaves" the year round. These softwood trees include pine, hemlock, cedar, spruce, and fir. The Douglas fir is the largest and most valuable tree in this region. It grows to a height of 60 m or more. Its huge trunk can

produce a lot of lumber. Many small Douglas firs are used as Christmas trees. Growing them has become a big business.

Tree farmers keep watch for fires and spray to control insects. Fire is the forest's worst enemy. It burns away the forest's carpet of needles, twigs, and dead leaves. This is *humus*. It acts like a sponge, soaking up rain water and melted snow.

When the humus is destroyed, the water rushes down slopes. It washes away the top soil. This erosion can cause floods.



*Fishing is a major industry in Alaska. These king crabs were caught in the lower part of Cook Inlet.*

## Fish, Minerals, and Oil

Fishing is one of the main industries along the coast. Shrimps, clams, and crabs are gathered along the shores of Washington and Alaska. Oysters are harvested from shallow waters in Puget Sound. Halibut, herring, and salmon are caught.

Many people in the Northwest earn their living in some part of the salmon business. Some catch the fish. Others work in the canneries. Most salmon are canned, though some are frozen, smoked, or sold fresh.

Some mining is carried on in the three Northwest states. All three states have deposits of coal and gold.

In 1896 deposits of gold were found on Alaska's west coast. When this news got out, fortune hunters rushed to the region. They pitched tents or put up shacks. Thus the "gold rush" town of Nome began. Later, gold was found farther inland on the Yukon Plateau. The gold miners helped to start the city of Fairbanks. Some gold mining is still carried on near Fairbanks and at Nome.

In 1968 rich oil deposits were found in Alaska's far north. They are buried deep in the earth near Prudhoe Bay. This part of Alaska is tundra. Tundra is frozen most of the year. During the summer the surface of the tundra thaws. It becomes a spongy swamp with patches of moss. The deep soil always remains frozen.

A number of oil companies made plans for drilling in this far north. Drilling equipment was moved to Prudhoe Bay. Drilling through the frozen earth was very hard. But the experts proved it could be done. The next problem was how to get the oil to the refineries. The nearest ones were far to the south near Seattle.

Prudhoe Bay and the Arctic Ocean are frozen most of the year. So tankers could not load at Prudhoe Bay. The oil would have to go overland by pipeline to Alaska's port, Valdez. It is free of ice most of the year.

The huge job of building the pipeline began in 1974. Eight oil companies joined to build the 1300-km pipeline. First, roads and camps for the workers were built. Then the work on the pipeline began.

Thousands of skilled men and women got jobs. There were road planners and road builders. There were truck drivers, welders, computer experts, and



*The Alaskan Pipeline carries crude oil to the ice-free port of Valdez. Why was the pipeline not constructed in a straight line?*

secretaries. Many workers in other jobs were needed, too. Trained foresters would replant trees and plants that were damaged along the pipeline. At Valdez, workers built the tanker terminal where the pipeline was to end.

The pipeline was built over kilometres of frozen tundra. It went through rugged mountains and over rivers. Work went on even when weather was minus forty degrees or colder.

The Alaskan pipeline was completed in 1977. In



the summer the first oil from the Prudhoe Bay fields began to flow through the new pipeline. At Valdez it was loaded onto a tanker. Then it began its journey to a refinery north of Seattle.

## **Towns and Cities**

**Most of the Northwest is very thinly settled.** The largest towns in southern Alaska include Ketchikan and Juneau. For many years Juneau has been the capital of Alaska. But in the early 1970s the people voted to move the capital. They wanted a more central location. A new capital is planned north of Anchorage in the Matanuska Valley.

**Fairbanks is the main city in central Alaska.** It is at the northern end of the Alaska Railroad and the Alaska Highway. Many tourists drive north on this highway, which starts in Dawson Creek, British Columbia.

Fairbanks is a trading centre for villages in the area. It has offices and warehouses that carry on oil business.

Alaska depends largely on air transportation to link its scattered cities and towns. Anchorage, the state's largest city, is the centre of a "spider web" of air lines. It is also on a main route to Asia. It links Japan and other parts of the Far East with the United States.

**Seattle is the largest city in the Northwest.** Seattle's location on Puget Sound has helped it to become a shipping centre. It is the chief port for trade with Alaska.

Seattle has airplane and missile industries. It manufactures many kinds of wood, metal, and food products. It has furniture factories and fish and vegetable canneries.

**Spokane is in a thriving lumbering, farming, and mining region.** It is the trading and business centre for this area. It uses products of the region in many factories. Spokane has woodworking plants for making doors and window frames. It has a huge flour mill. It has fruit, vegetable, and meat canning and packing plants. It also turns out many aluminum products.

**Portland, Oregon's leading city, is a busy trading centre.** It has grown up on the Willamette River near where it joins the Columbia River. Portland is more than 160 km inland. But ships can go up the broad, deep Columbia River to Portland's docks. Portland is near one of the few gateways through both the Cascade and Coast ranges.

Portland's mills and factories turn out lumber, furniture, woollen goods, and chemical products.

Portland has so many rose gardens that it is called the "City of Roses." Three-fifths of all the people in Oregon live in the metropolitan areas of Portland, Eugene, and Salem, the capital.

*The Seattle business district overlooks the dock area.*



## Using What You Know

Look through the section on the Pacific Northwest and decide what facts should be remembered. Write down five questions about these facts.

When the class is ready, divide into two teams. Then decide on rules for your review game. Which team will ask the first question? How will you keep score? See which team can answer the most questions correctly. After a question has been asked, try not to ask it again.

## Key Skills Practise

1. Find a book in the library that will give you information about one of the following groups of Native People.

Inuit	Aleuts
Tlingits	Nez Percé
Athabascans	Haidas

Write a brief report on what you have found out.

2. Make a poster about protecting our forests. Display the best posters in your classroom or library.
3. Locate on a map all the active volcanoes in the United States and Canada.
4. List the characteristics that British Columbia has in common with the Pacific Northwest states.
5. Explain why the plateau lands east of the Cascades receive very little rain.
6. Find out why the sun shines both day and night during the Alaskan summer. Does this happen in Canada? If so, where?

## Learning More About Latitude

East-west lines on maps and globes are called lines of latitude, as you know. Notice these lines on the global map. They show distance north and south of the equator. Notice that the equator is numbered  $0^\circ$ . The other lines of latitude are numbered north and south from the equator. There is a line of latitude numbered  $20^\circ$ , *north* of the equator, and one with the same number *south* of the equator, for example.

The lines of latitude with the lowest numbers mark the east-west lines near the equator. So the region close to the equator is sometimes called the

*low latitudes*. The low latitudes are between the two lines of latitude marked  $23\frac{1}{2}^\circ$ . These two lines have special names, the Tropic of Cancer and the Tropic of Capricorn. Find them on the global map. The low latitude regions are known as the *tropics*.

Find the latitude lines with the highest numbers. They are near the North Pole and the South Pole. The regions near the poles are called the *high latitudes*. The high latitudes are between the lines of latitude marked  $66\frac{1}{2}^\circ$  and the poles, which are marked  $90^\circ$ . The lines marked  $66\frac{1}{2}^\circ$  are known as the Arctic Circle and the Antarctic Circle. Find them on the global map.

The regions between the low latitudes and the high latitudes are known as the middle latitudes. They are between the latitudes numbered  $23\frac{1}{2}^\circ$  and those numbered  $66\frac{1}{2}^\circ$ .





1. On the picture are some circles containing numbers. Write the numbers in your workbook. Using the list below, write the correct word beside each number.

- equator
- Arctic Circle
- Antarctic Circle
- Tropic of Cancer

- Tropic of Capricorn
- low latitudes
- middle latitudes
- high latitudes



# The Southwest States and Hawaii

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**California is the largest state in the Southwest area.** Its long coastline runs along the Pacific for 1350 km. Arizona and Nevada are inland states.

Hawaii is far out in the Pacific Ocean. It is made up of a string of islands. There are eight main islands. The largest one is named Hawaii. The most thickly settled is Oahu. The capital of the state, Honolulu, is located on Oahu.

Each of these four states has a pleasant climate and interesting scenery.

**California, Arizona, and Nevada were a part of the Spanish Southwest.** The Spaniards were the first people to explore these lands. Many of their descendants live in the Southwest today.

Spanish ideas and customs still influence ways of living in the Southwest. Rodeos and fiestas are still held. Ideas from Spanish and Mexican architecture can be seen in many buildings.

**Arizona has the largest Native American population of any state.** The Navajo, Hopi, Papago, and Pima are some of its people. The name *Arizona* is a Native American word said to mean "little spring."

**Hawaii was first visited by the English explorer, James Cook, in 1778.** It was in Hawaii that Cook was killed. Hawaii became a territory of the United States in 1898. In 1959 it became the fiftieth state to join the union, hence the expression, "Hawaii 5-0."

**The Southwest states and Hawaii have many mountains.** The Hawaiian Islands are the tops of volcanic mountains. Kilauea Crater on the side of Mauna Loa, in Hawaii Volcanoes National Park, is still an active volcano.

California has some volcanic mountains, too. They are a part of the Cascade range, which extends from Oregon into northern California. Two Cascade peaks in California were formed by volcanoes. One is Mount Lassen and the other is Mount Shasta.

Two other ranges of mountains run through California. Near the Pacific Ocean is the Coast Range and along the boundary between California and Nevada is the Sierra Nevada range.

**There are fertile valleys between the mountain**

**ranges.** Central Valley is more than 640 km long. It lies between the Sierra Nevada and Coast ranges. It has rich soil but needs irrigation. The Coachella and Imperial valleys in the south are desert valleys. They get only a few centimetres of rain a year. Irrigation makes farming the main industry.

**The Colorado Plateau occupies a large part of Arizona.** One of its most colorful areas is Grand Canyon National Park.

The Grand Canyon extends through Arizona for about 320 km. It was carved out by the Colorado River many thousands of years ago.

**The Colorado is the largest river flowing through these states.** It starts as a small stream high in the Rockies. On its journey it rushes along the floor of the Grand Canyon. The floor is nearly 600 m below the canyon rim.

In earlier years the Colorado River caused damaging floods every spring because of melting snows. Today, large dams hold back huge lakes. Two are Hoover Dam and Glen Canyon Dam. The stored water is used for irrigation and for many homes and industries. Powerhouses below the dams produce electric power for Nevada, Arizona, and California.

Oroville Dam is on a branch of the Sacramento River. Its thick wall reaches more than 1 km across a canyon. Water from Lake Oroville flows south to a place east of San Francisco. There it is pumped into the California Aqueduct, a cement-lined canal. The water flows south to the end of the San Joaquin Valley. The Aqueduct supplies irrigation water for nearly forty thousand hectares of once-dry croplands.

**The Great Basin spreads across most of Nevada and into California and Arizona.** The vast Mojave Desert is part of the Great Basin in California.

Death Valley is another part of the basin lands. It is on the border of California and Nevada. Death Valley is a sun-baked desert with scorching summers. It has the lowest lands in the United States. Part of it is 85 m below sea level.

**California, Nevada, and Arizona have a variety**









*The Grand Canyon was formed millions of years ago by the Colorado River. How can a river form a canyon?*

**of climates.** Along California's coast, ocean breezes cool the land in summer. They keep the weather mild in winter. They also bring rain clouds.

Northern California's coastal lands have very rainy winters. They have a climate much like the coastal lands in the Northwest region.

Much of the land in these states is dry. Water is in such short supply that scientists are searching for more ways to provide it.

The desert areas have a sunny climate winter and summer. Summer days are blistering hot. Tempera-

tures may soar to forty-five degrees or even higher.

Parts of California and Arizona have a long growing season. In some places crops can grow all year long.

**Hawaii's climate is warm all year round.** These islands have a tropical climate. The weather is seldom really hot. Sea breezes usually cool the islands.

The winds blow across thousands of kilometres of ocean and gather a great deal of moisture. As they reach Hawaii's mountains, they rise and become even cooler. Most of their moisture falls as rain on



the northeastern sides of the islands.

The northeast slopes have a dense tangle of trees, vines, flowers, and ferns. The southwest areas are much drier. Farms there are irrigated.

### **Farming and Stock Raising**

Less than one-twentieth of the land in the southwestern United States is suitable for growing crops. In spite of this, irrigation has made the Southwest a rich farming region.

Many farms extend over thousands of hectares. Most of these large farms, or ranches, are owned by a company or by a group of people.

Ranchers use many kinds of machines, even airplanes. Among them are tractors, tree-shakers, and cotton-pickers. Some farmers use low-flying planes to plant seed, such as rice. The farmers may hire experts to fly low and dust or spray crops to control insects. In the winter small planes may drop food to livestock trapped after a snowstorm.

**Cotton is one of the leading crops in Arizona and California.** Thousands of hectares of cotton are grown. Many cotton ranches are very large. One reason is that costly machinery is needed to raise this crop. Farmers cannot afford to buy such machines for a small farm.

**Arizona's farms produce a variety of crops besides cotton.** These include citrus fruits, cantaloupes, vegetables, and alfalfa.

**More than two hundred different crops are raised in California.** Citrus fruits are grown in southern California and in parts of the Central Valley where the climate is mild.

Central Valley farms produce tonnes of peaches, plums, cherries, apricots, figs, and grapes in the valley's "fruit salad lands." Some fruits are sold fresh and millions of kilograms are canned, frozen, or dried. The hot summer air is just right for drying fruits. Tonnes of grapes and plums are dried. Dried grapes are sold as raisins and dried plums are prunes.

Rice is raised in the northern part of the Central Valley. Some ranches produce sugar beets, and others raise alfalfa. One of the largest crops is tomatoes. Tonnes of strawberries are grown near Anaheim, south of Los Angeles.

Crops can be grown for about three hundred days of each year in the desert valleys. The Imperial Valley sends tonnes of winter vegetables to market. The

Coachella Valley is famous for its dates and grapefruit.

**Hawaii's tropical climate makes sugar cane the state's largest crop.** Sugar cane is a kind of giant grass. It looks something like a tall, thick cornstalk. When the stalks are ripe, they are full of sweet juice. Sugar is made from this juice.

The cane is planted by a large machine. It digs furrows and drops pieces of stalk into them. Soon little plants sprout and grow from the stalks. At harvest, the thick stalks may be 3.6 m high.

The fields are set on fire as harvest begins. This destroys the leaves but does not damage the stalks or the sweet juices inside. After the stalks are cut, they are picked up and are sent off to the mills in California for refining. There they are made into sugar.



*Fields of sugar cane (top) and pineapples (bottom) in Hawaii.  
Name the plant grown in Canada which produces sugar.*

In earlier years many workers came from Japan, China, and the Philippines to work in the cane fields. Most of them stayed on the islands. Many of Hawaii's people can trace their ancestors back to those who came to work in the sugar industry.



*Tuna is caught off the shores of California.*

**Pineapples are another famous crop in Hawaii.** They are grown on pineapple plantations owned mainly by large companies.

Some pineapples are sold fresh. But most are canned, or are crushed for their juice.

**Nevada and Arizona have huge cattle and sheep ranches.** Some also spread over the hilly back country of California. Most grazing lands are found in the rolling areas not suited to farming.

Hawaii has several large cattle ranches. One has 71 200 hectares and is one of the largest in the world. It was started by a New Englander. Its first cowhands came from Mexico.

California has a big dairy business and many poultry ranches. The Petaluma area north of San Francisco calls itself the "Egg Capital of the World."

## **Fishing, Lumbering, and Mining**

**Fishing is a major industry in California and Hawaii.** Tuna, sardines, halibut, and barracuda are caught off the California coast. Tuna is the most important catch.

Canneries prepare tuna for market. After the fish are cleaned, they are cooked in huge ovens. Workers remove the bones and pack the tuna in cans. The cans are sealed tightly and cooked for more than an hour. Then they are labelled and prepared for shipping. The catching and canning of tuna provide jobs for many people.

**Lumbering is an important industry in northern California.** Redwoods, pines, and Douglas firs are among the main kinds of trees cut.

Redwoods are giant trees that like very damp air. They grow in the wet coastal lands of northern California. They are among the oldest and tallest trees in North America. Some redwood forests have been set aside as national parks.

**The Southwest has rich mineral and petroleum treasures.** Arizona's mines produce more copper than any other state's. The cities of Globe, Bisbee, and Douglas have grown up chiefly because of the valuable copper mines nearby. Copper is also mined in Nevada. Gold and silver are also mined in Nevada and Arizona.

California has a number of rich oil fields. Pumps send oil through underground pipes to refineries in the Los Angeles-Long Beach area. Another is near San Francisco.

## **Cities of the Southwest**

There are parts of the Southwest with very few people. Other parts are densely settled.

A group of cities all running into one another and sprawling for kilometres is called a megalopolis. Los Angeles is part of a megalopolis which extends as far as San Diego.

Metropolitan San Francisco is another thickly populated area. Many cities have grown up around San Francisco Bay.

**San Francisco is a leading seaport on the Pacific.** It is at the north end of a peninsula and faces water on three sides. To the west is the Pacific Ocean. San Francisco Bay is to the north and east.

The bay has one of the world's best deep harbors. Coastal hills protect it from ocean storms. The place





*San Francisco's Golden Gate Bridge. Why is this bridge world- famous?*

where the hills break provides the harbor's entrance, called Golden Gate. A high bridge spans Golden Gate. Thousands of people travel across the Golden Gate Bridge every day.

Many ships sail through Golden Gate into the bay. When they leave, they may carry such exports as cotton, grain, canned foods, and manufactured goods. Much trade is carried on with Hawaii, the Far East, and Australia.

San Francisco is built on many steep hills. Special streetcars called cable cars travel up one hill and down another clanging their bells.

**Across San Francisco Bay are other busy cities.** They are linked with San Francisco by bridges. Oakland is a trading and shipping centre. Berkeley is the home of the huge University of California.

**Los Angeles is the largest city on the west coast.** Los Angeles spreads out over more land than any other city in America. The ocean harbor has been deepened and widened. Ships from all over the world tie up at its wharves.

Los Angeles was founded by the Spanish in 1781. In the late nineteenth century the city grew as rail-

ways brought more people. Along with nearby cities, Los Angeles has been growing ever since.

The Los Angeles area is a leading industrial centre. It has aircraft and missile plants. There are electronics firms, auto-assembly plants, oil refineries, food-packing plants, and many other kinds of factories. As well as being an industrial centre, the Los Angeles area, especially Hollywood, is world-famous for its movie industry.

Air pollution is often a problem in Los Angeles. Smog is caused by its factories, heavy auto traffic, and weather conditions.

The large International Airport serves the Los Angeles area. More than a million planes take off and land there every year.

**San Diego and Sacramento are two other California cities.** Sacramento is the capital of California. It is the leading manufacturing and trading city for the northern part of Central Valley.

San Diego has a deep harbor. It is a centre for aircraft and space industries.

**Phoenix is Arizona's fastest growing city and its capital.** Phoenix is in the heart of a rich farming



*Diamond Head rises above the busy city of Honolulu.*

area. Many of its people work in canneries and food-packing plants. Phoenix is also a shipping centre for these goods and for the beef cattle raised nearby. But it, too, has much manufacturing. Some plants turn out aircraft. Others produce air conditioning and electronic equipment.

Both Phoenix and Tucson, Arizona, attract many tourists during the winter. People from all over the country enjoy the dry, sunny climate.

**Honolulu is Hawaii's capital and its main seaport.** Over half of the people of this state live in Honolulu. Ships from all over the world tie up at the docks of its fine harbor. Freighters unload manufactured goods, gasoline, and foods. Some ships carry away cargoes of fresh and canned pineapples and sugar.

A big airport near Honolulu handles planes that fly the Pacific airways. Hawaii is sometimes called "the crossroads of the Pacific."



## Using What You Know

1. Copy and complete this chart comparing the Southwest states and Hawaii:

State	Climate	Physical	Features	Natural Resources	Industries
California					
Arizona					
Nevada					
Hawaii					

2. How does the climate along the coast of northern California differ from the climate of the coastal areas of British Columbia?
3. What are the leading farm products of the four states in this chapter? What are the farm products from British Columbia, Alberta, and Saskatchewan?

## Working with Key Facts

Tell whether the following statements are true for British Columbia only, the Southwest states only, or for both British Columbia and the Southwest states.

1. There is a mild climate summer and winter.
2. Many people speak Spanish.
3. Large amounts of fruit are grown.
4. The Rocky Mountains are in this part of the world.
5. Irrigation is necessary to grow some crops.
6. Los Angeles is a city in this area.
7. National parks have signs in French and English.
8. One of the early explorers in this area was Captain Cook.

## Key Skills Practise

1. Learn all you can about some interesting things to do and see in one of the cities listed below. Be ready to take your class on a tour of "your" city.

Calgary	Victoria	Honolulu
Los Angeles	Reno	Regina
Tucson	San Francisco	Edmonton

2. At what latitude are each of these cities located?

Vancouver	Yellowknife	Washington
Anchorage	Salt Lake City	Regina

You will have to use your atlas.



## Latitude and Climate

You have learned that we often use latitude lines to divide the earth into regions. There are the low latitude, or tropical, regions; the middle latitude regions; and the high latitude regions.

Look for these regions on the map on this page. Find the middle, or mid-latitude, regions. Notice that one of these regions is north of the tropics and one lies to the south. In which one do you live?

Find the high latitude, or polar, regions. As you can see, one is near the North Pole. The other is near the South Pole.

The region near the equator is hot. The regions around the two poles are cold. So as you travel from the equator toward either of the poles, the climate becomes colder. If you know the latitude of a place or the region in which it lies, you will know something about its climate.

In the low latitude, or tropical, regions the weather may be warm the year round. There is no spring, summer, fall, or winter as we think of them.

In which of the regions would you expect to find the coldest and longest winters? The high latitude, or polar, regions have very short summers and cold weather for most of the year.

Most parts of North America are in the middle latitudes. They have warm summers and cold or cool winters. What kind of climate does your part of the country have?

1. In your workbook answer the following questions.
  - A) East-west lines on maps and globes are called \_\_\_\_\_.
  - B) Lines of latitude show \_\_\_\_\_.
  - C) The equator is numbered \_\_\_\_\_.
  - D) The United States is in the \_\_\_\_\_ latitudes.
  - E) Northern Alaska is in the \_\_\_\_\_ latitudes.
2. A) Write in your workbook the correct names which correspond to the boxes on the picture.
  1. middle latitudes
  2. low latitudes
  3. high latitudesB) Write in your workbook the correct degrees of latitude which correspond to the circles on the picture. Use the picture on this page of your book as a guide.  
C) What hemisphere is shown?





## Comparing Canada with the United States

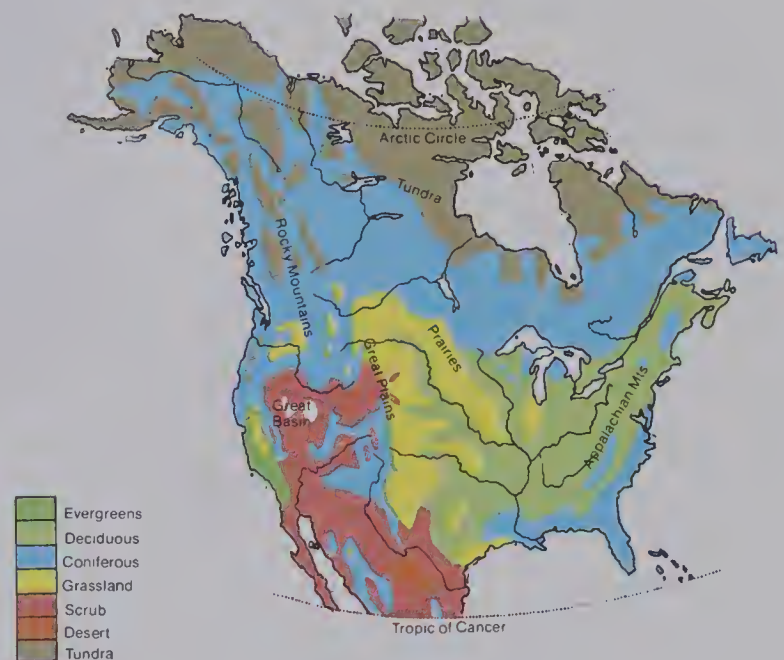
1. Where are the largest cities in Canada generally located? Why?
2. Where are the largest cities in the United States generally located? How does this differ from the location of Canadian cities? Why?

Explain your answers to the following questions by comparing the maps.

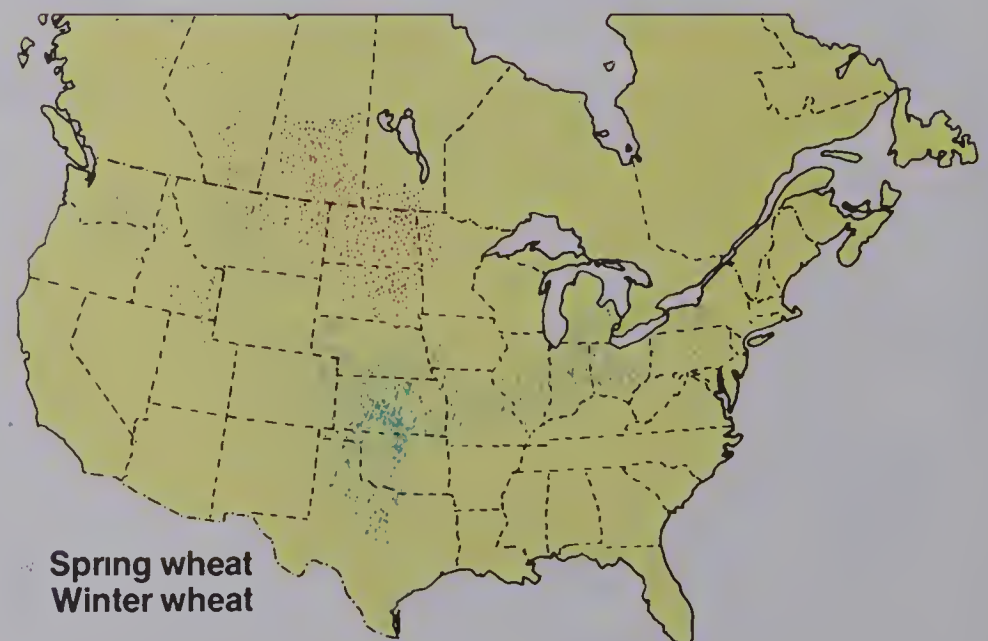
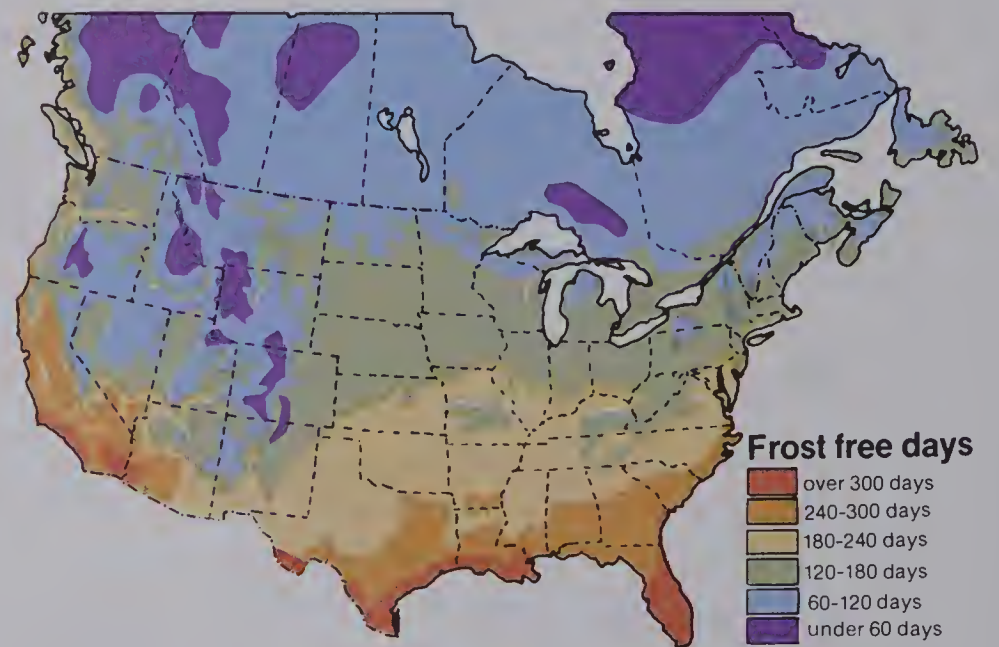
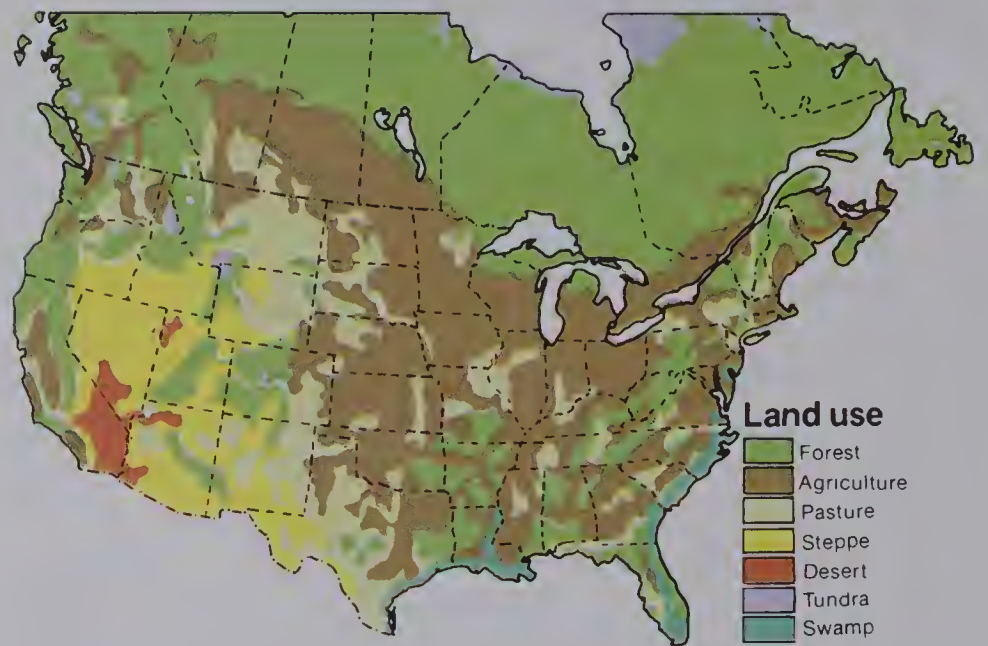
3. Winter wheat is grown in which land use area? How does this location relate to the frost-free days?
4. What is the relationship between frost-free days and natural vegetation?
5. What relationship can you see between the size of the population and the employment in manufacturing? Employment in wholesaling? What is the difference between wholesaling and manufacturing?
6. What relationship can you find between the location of population and land-use? Between frost-free days and spring wheat?
7. Why are oil and gas fields generally in areas of little population?
8. What relationship is there between the location of coal deposits and the type of natural vegetation? How is coal formed?
9. What difference is there in the scale of the maps of north America and the maps of United States and parts of Canada? What does this difference mean in terms of the amount of information portrayed?



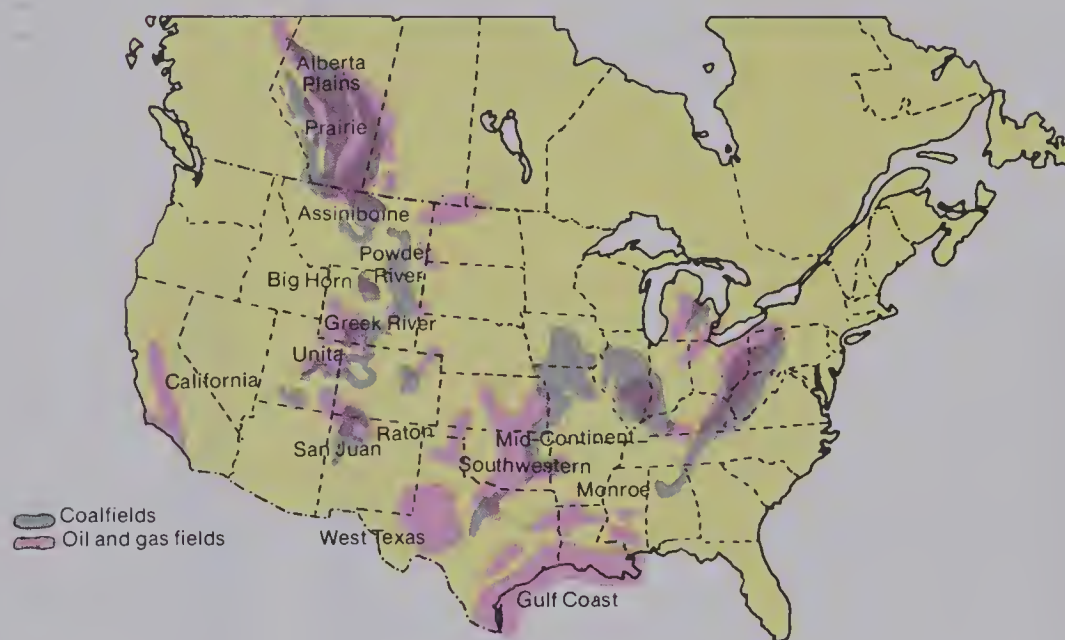
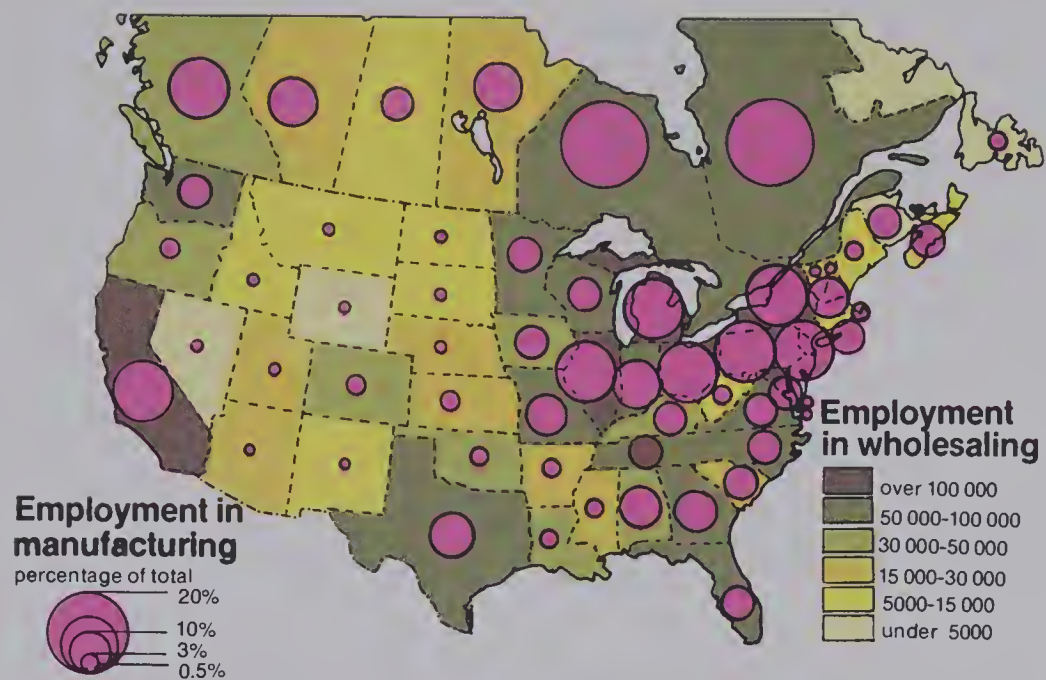
**Population**




**Natural vegetation**







## Power



1949 Newfoundland enters Confederation

1905 Alberta & Saskatchewan enter Confederation

1885 Riel Rebellion in Saskatchewan

1885 Completion of CPR to British Columbia



1874 Creation of North-West Mounted Police

1873 Prince Edward Island enters Confederation

1871 British Columbia enters Confederation

1870 Manitoba enters Confederation

1869 Canada buys Rupert's Land from HBC

1869 Transcontinental railway completed in U.S.

1867 July 1, Confederation

1866 Fenian Invasion of Canada

1864 Charlottetown and Quebec Conferences

1863 Emancipation Proclamation

1861 Civil War begins in U.S.

1859 Gold Found in Cariboo District

1856 Gold found in British Columbia

1853 Gadsden Purchase



# UNIT 2

## Important Events in American and Canadian History



1849 California Gold Rush begins

1848 U.S. wins New Mexico and California

1845 Texas joins the United States

1837 Texas becomes an independent country

1835 War between Texas and Mexico

1832 Second Red River Settlement

1821 Mexico wins freedom from Spain



1816 Failure of First Red River Settlement

1814 Burning of Washington

1813 Burning of York (Toronto)

1812 First Red River Settlement

1812 War between Canada and the U.S.

1808 Simon Fraser travels to West Coast via Fraser River

1806 Pike Expedition

1804 Lewis & Clark Expedition

1803 Louisiana Purchase

1793 Alexander Mackenzie reaches West Coast by land

1792 Captain Vancouver explores the West Coast

1778 Captain Cook explores the West Coast

1776 U.S. wins independence

# The American Revolution and the United Empire Loyalists

The War between Britain and France over North America had ended in 1763. Britain now controlled all of the eastern part of the continent. The Thirteen Colonies were spread along the eastern coast. Quebec, Nova Scotia, and Newfoundland lay to the north of the Thirteen Colonies. Farther north and to the west was Rupert's Land.

West of the Thirteen Colonies a large strip of land was reserved by Britain for the Indians and the fur trade. The land west of the Mississippi still belonged to France. It was called Louisiana.

The population of the Thirteen Colonies was about five hundred thousand. It was growing rapidly. Most of the people had originally come from Britain. There were also Dutch, Swedish, German, and other settlers. Nearly one-third were slaves of African origin. Most of the slaves lived on plantations in the south. By comparison, there were only about sixty thousand people in Quebec. They were people of French origin. In Nova Scotia and Newfoundland there were much smaller numbers of British settlers.

## The Thirteen Colonies Quarrel with Britain

Each colony had a governor, appointed by the king in Britain. For years, though, the colonies governed themselves almost completely. They chose the legislatures that made the laws, even the tax laws.

The colonies were many kilometres away from Britain. It took three or four months to send a message to the colonies and get an answer. To Britain, it seemed easier to ignore the colonies. As the years passed, the colonies did more and more as they pleased. This was freedom and they liked it.

From time to time the British government had passed trade laws. These laws said the colonists must ship goods such as sugar, cotton, tobacco, and furs only to Britain. They had to buy certain manufactured goods from Britain. These included tools, nails, buttons, and woollen cloth. The colonists were not allowed to make these things for sale to other countries. Also, they could not buy goods from other countries. Anything they bought had to



come from Britain. Products for sale to other countries had to be sent to Britain first, where a tax was added. This meant that the colonists often received low prices for their goods. But they had to pay high prices for items that had been brought from Britain.





*The Second Continental Congress appointed a committee to write the Declaration of Independence. Thomas Jefferson and Benjamin Franklin were on the committee.*

The colonists soon began to ignore the trade laws and the colonial trade officials did not enforce them. Colonial business with other countries, such as the West Indies, was good.

By 1763 Britain decided to enforce the trade laws. The war with France had cost the British a lot of money. Also British soldiers were in America to protect the colonists. The soldiers had to be fed and paid. It was decided that the colonists should pay more taxes.

**In 1765 Parliament passed the Stamp Act.** A special stamp was now required on each newspaper printed in the colonies. Stamps were also necessary on calendars, licenses, and important papers. These stamps had to be bought from the British government.

When the people in the Thirteen Colonies heard about the Stamp Act, they were very angry. For a hundred years they had been making their own tax

laws. This Stamp Act would take away much of their freedom. The colonists asked the King to let them help make new tax laws. But the King would not listen.

Besides the tax laws, there was another source of disagreement. Britain had promised that the land to the west, the Ohio Valley, should be kept for the Indians and the fur traders. But many people in the Thirteen Colonies wanted to move westward. They wanted to settle on the fertile lands of the Ohio Valley.

Tension increased between the Thirteen Colonies and Britain. Some colonists organized themselves to fight the Stamp Act. One such group was called the Sons of Liberty. Another was the Daughters of Liberty. Both spoke out against the Stamp Act. They persuaded the colonists not to buy British goods. This hurt British business. Finally Parliament did away with, or *repealed*, that Act.





*The colonists attacked the British near a bridge at Concord, Massachusetts.*

Less than two years after the repeal of the Stamp Act, Parliament passed other taxes. These were taxes on lead, paint, glass, paper, and tea. The new taxes angered the colonists just as much as the old ones had.

In 1770 there was a fight between a crowd of colonists and a group of British soldiers. The soldiers fired on the crowd and several people died. The colonists called this fight "The Boston Massacre."

In 1773 special tax officers were ordered to punish anyone who broke the laws. This stirred the colonists into action. In dozens of towns and villages, the Sons of Liberty and the Daughters of Liberty met. One night a group of the Sons of Liberty in Boston agreed on a daring plan. In the harbor, they boarded some ships carrying cargoes of tea. The tea could not be unloaded until a tax had been paid. Using sharp hatchets, they opened dozens of chests of tea, and dumped the tea overboard.

When the government in Britain heard about

"The Boston Tea Party" it sent General Thomas Gage with an army to Boston. General Gage, who was made governor of Massachusetts, closed the harbor. This made the colonists even more bitter towards Britain.

### **The Continental Congress**

The colonists sent their leaders to discuss the problem in Philadelphia in 1773. This was the first time that all the leaders had met. The meeting became known as the First Continental Congress. The leaders said that the colonies would remain loyal to Britain. But they insisted that the tax acts should be repealed. In the meantime, they decided not to buy British goods.

Many of the colonists wanted to be ready for war with Britain. General Gage heard about this and sent soldiers to Lexington and Concord. These were small towns near Boston. A fight took place here between the soldiers and some rebels. News of the fighting spread quickly. Some colonists thought that they should settle their differences with Britain peacefully. They remained loyal to the King and were called *Loyalists*.

The Second Continental Congress met in Philadelphia in 1776. The members decided that the Thirteen Colonies should declare their independence from Britain. A committee was set up to write a Declaration of Independence. The Declaration was approved on July 4, 1776. The Thirteen Colonies would now have to fight for their independence.

### **The War of Independence**

In the first year of the war, the rebels seemed to be losing. The Second Continental Congress appointed General George Washington to lead the army. Washington was a skillful and experienced soldier. However, he was unable to stop the British from capturing New York and Philadelphia. By 1777, it looked as if British troops from Montreal and from New York would meet on the Hudson River. That would cut New England into two parts. The Battle of Saratoga spoiled this plan.

Saratoga was the turning point of the war. The French now joined the side of the Americans. When Washington's troops defeated the British at York town in 1781, the war was ended.





*The American victory at Saratoga was a turning point in the war. For what reasons is that statement true?*

### **The Other British American Colonies**

**The colonists north of the Thirteen Colonies, did not join the revolution.** In Quebec, Nova Scotia, and Newfoundland they watched the events to the south with much concern.

Newfoundland was a fishing colony. The Newfoundlanders did not like New England fishermen coming to their shores. Also, their ties with Britain were very strong. They had no desire to join the revolution.

In Nova Scotia, the feelings were different. Many Nova Scotians had come from New England. But Halifax was an important naval base for Britain. Its merchants depended upon Britain and the West Indies for trade. Some people sympathized with the rebels, but no one joined the revolution.

The situation in Quebec was more uncertain. It was only seventeen years since Britain had taken New France. The American rebels thought that it

would be easy to get the French-speaking Quebecers to join them. After Lexington and Concord, American soldiers marched north and captured Montreal. They then marched on Quebec. But the Americans were weakened by smallpox, a fast-spreading disease, and the Quebecers did not want to help them. When a British fleet arrived in the spring of 1776, the Americans had to retreat.

### **The United Empire Loyalists**

**When the war ended, there were thousands of people in America who were still loyal to Britain.** Many had always lived under British rule. They wanted to live under the continued protection of Britain and to remain part of a great empire. For this reason, some left their homes to join the British troops. Perhaps as much as one-third of the population were Loyalists. Some were wealthy landowners and held public offices. Many were merchants and businessmen. Some were farmers and craftsmen.









*A group of Loyalists camped on the banks of the St. Lawrence River.*

During the revolution, the Loyalists were often mistreated. Many lost their jobs. Sometimes they were covered in tar and feathers and wheeled on a cart around the town. People would jeer and poke fun at them. The homes of Loyalists would be looted or destroyed. Some were put into prison. Life was so difficult for anyone who was a Loyalist that many became refugees. Refugees are people who no longer have anywhere to live. The Loyalist refugees had to leave the United States.

Some of the refugees went to England, others sailed for Bermuda. But most went north to Nova Scotia and Quebec.

**The British government organized hundreds of ships to take the Loyalists from New York.** Another great fleet of ships took Loyalists from Charleston, North Carolina. Other Loyalists travelled north by land. Britain felt that it should help to resettle those who had remained loyal.

By 1783 over thirty thousand Loyalists had reached Nova Scotia. That was about twice as many people as were already living there. From Nova

Scotia, many went on to settle in Prince Edward Island and Cape Breton. About ten thousand settled along the St. John's River Valley (now known as New Brunswick). Forty hectares of land were granted to every settler and twenty hectares to each family member. Families were also supplied with farm tools and food. This support helped them to get started in their new homes.

Many of the Loyalists in Nova Scotia had come from the large towns of New England. They did not know how to make a living on the land. Some of these either drifted back to the United States or went to Britain. But most Loyalists learned to survive and contributed much to the development of Nova Scotia.

Other Loyalists came to live in unsettled areas of Quebec. Some received grants of land in the region south of the St. Lawrence. But many went westward. They settled along the St. Lawrence, on the shores of Lake Ontario, and on the Niagara Peninsula.

Like the Loyalists in Nova Scotia, those in





*These Loyalists draw a certificate from an officer's hat. The certificate will show where their land is. What might the soldier with the map be doing?*

Quebec faced many problems. Often there were delays in getting land grants. The land had to be surveyed and divided. The forests had to be cut and cleared and the earth tilled. But the people who came to Quebec had usually had experience in frontier life in the American colonies. They adapted more quickly to their new life than did those in Nova Scotia.

**The coming of the Loyalists had important effects on British North America.** The addition of over fifty thousand people suddenly swelled the population in the colonies. New areas were developed and new towns came into existence.

Sometimes there were tensions between the new settlers and the old. But soon all worked more closely together for the good of the colonies. Farming communities sprang up; schools and churches were built; newspapers were published. Roads and canals were constructed. Large businesses, such as lumbering and ship-building, developed. Because of these changes people began to enjoy a higher standard of living.

**The coming of the Loyalists had an important effect upon government.** Thousands of Loyalists had settled along the St. John's River Valley. This was a long way from Halifax, the capital. Travel was slow, and the settlers wanted better communications. So, in 1784, Nova Scotia was divided and the western part became New Brunswick.

The Loyalists in Quebec were proud of their British heritage. They didn't want to adopt the French laws and language. Because of that, the British government divided Quebec as well. Upper and Lower Canada were created in 1791.

At the same time, changes were made in the system of government. Nova Scotia and New Brunswick had already been granted elected assemblies. But Upper and Lower Canada had been ruled by governors appointed in London. Loyalists had had some experience in self-government. They wanted Britain to introduce elected assemblies in the Canadas as well. So Britain passed the Constitution Act which gave them elected assemblies. The settlers were proud of this achievement.





*This painting shows a house in Fredericton, New Brunswick. It was the type of house built by the Loyalists.*



*The first meeting of the Assembly of Lower Canada. The Loyalists helped to bring representative government to British North America.*

## Using What You Know

1. Suppose that your class is a family living at the time of the American Revolution. Discuss among yourselves whether you would side with the Loyalists or the patriots.
2. On a map of Canada, shade in the areas where most of the Loyalists settled. Why did they go to these areas?
3. Your class is the British Cabinet. You have just heard the news of the "Boston Tea Party." What steps will your government take to handle the crisis?
4. Find out more about each of the following people:  
Benjamin Franklin                      General Gage  
King George III                          Thomas Jefferson

## Working with Key Facts

Write the numbers 1 to 8 on a piece of paper. Beside each number write the letter of the following events in the order in which they happened.

- A) The Sons of Liberty hold the "Boston Tea Party"
- B) Skirmishes take place at Lexington and Concord
- C) First Continental Congress is held at Philadelphia
- D) The Thirteen Colonies approve the Declaration of Independence
- E) The Stamp Act is passed by Parliament
- F) Washington's troops defeat the British at Yorktown
- G) General Gage is made governor of Massachusetts
- H) The British are defeated at Saratoga

## Using Key Ideas

1. Why did Nova Scotia, Quebec, and Newfoundland not join the Revolution?
2. Should the United States have paid the Loyalists for the property they left behind them?
3. Would colonists of Dutch, German, or Swedish origin have felt differently towards Britain than colonists of British origin?
4. Communication between Britain and the American colonies was very slow. How do you think this contributed to problems between them?

## *In Focus*

### CANADIANS AND AMERICANS CELEBRATE

Canadians and Americans celebrate some official holidays on the same day. They may have the same name, and be celebrated in similar ways. Christmas, New Year's, Easter, and Passover are



such holidays. Schools and businesses close on official holidays.

Our countries also share a number of unofficial holidays. They are often known for their symbols, such as a Valentine's Day heart, a St. Patrick's Day shamrock, or a Hallowe'en jack-o'-lantern.

Some holidays are observed only in certain areas. On June 24, Canadians in Newfoundland celebrate the 1497 arrival of John Cabot to their shores. On the same day, Quebecers celebrate the day of their patron saint, St. Jean Baptiste. Discovery Day (August 17) is observed only in the Yukon, while Albertans celebrate Heritage Day on the first Monday in August.

Similarly, not all Americans join citizens of New England in celebrating Forefathers' Day on December 21. Nor do they mark Patriots' Day on the third Monday in April with residents of Maine and Massachusetts.

The same holidays are sometimes observed by both Canadians and Americans but on different days. On the second Monday in October, Canadian families give thanks for the plentiful food that has been gathered.





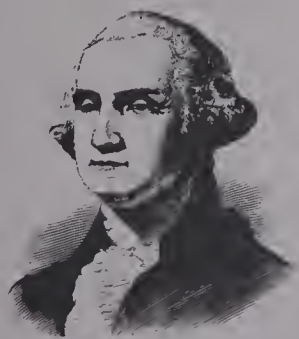
American Thanksgiving is observed on the fourth Thursday in November. In 1619, settlers in Virginia held a service to give thanks to God for their safe arrival in the New World. Four years later, the Pilgrims in New England gave thanks for the bountiful harvest that took place after their first dreadful winter. This was a Thanksgiving of prayer *and* celebration.

Every November 11, we wear red poppies on our coats. Poppies grow in Belgium, where many Canadian soldiers died in the First World War. We wear poppies to remind us of their bravery. On the eleventh hour of the eleventh day of the eleventh month we stand in silence for one minute to think about Canadian soldiers who have died in wars since 1914.

Americans also honor all those who have served in their armed services. They call November 11 Veterans' Day. They also remember soldiers on Memorial Day, the last Monday in May. On this day, flags and flowers are put on the graves of soldiers killed in all wars since the American Civil War (1861-1865).

Some holidays are observed only in Canada or in the United States, but not both. For example, most Canadians celebrate Victoria Day on the Monday before May 24.

In the United States, there is a holiday to



celebrate George Washington's birthday on February 22.

Finally, both countries celebrate their own birthdays. July 4, Independence Day, commemorates the signing of the American Declaration of Independence in 1776. It is celebrated with picnics, parades, and firework displays. Special festivities in 1976 celebrated the

two-hundredth birthday of the United States. This was called the Bicentennial celebration.



Canada's birthday, Dominion Day or Canada Day, is on July 1. On this day we celebrate the signing in 1867 of the British North America Act that created Canada. Most Canadians celebrate



their national holiday in much the same way as the Americans do. In 1967, our Centennial year, we celebrated our one-hundredth birthday, with festivities across the country.

### USING WHAT YOU KNOW

1. Tell about a holiday that is celebrated only in your part of Canada.
2. How is Dominion Day or Canada Day celebrated in your community? How would you like to see it celebrated?

### USING KEY SKILLS

1. Write a proposal for a new official holiday to be celebrated by all Canadians. It might be based upon a person or an event from Canadian history.
2. Pick a seasonal holiday, such as Christmas, New Year's, or Easter. How is it celebrated in your area? How would you celebrate it if you lived in a part of the United States that has a completely different climate from yours?
3. Research the reasons behind the Canadian celebration of Victoria Day.

# The War of 1812

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The United States and Britain became more friendly after the Treaty of Versailles. They exchanged ambassadors. Trade between them increased. This meant that relations between Canada and the United States were better also.

After 1800, however, events in Europe began to cause strain between the United States and Britain. Napoleon, Emperor of France, attacked other European countries and gained control over them. Some of these countries were allies of Britain. Britain and France went to war.

Since France had helped America to win independence, many Americans now felt it was their turn to help France. In addition, there were still bad feelings towards Britain in some parts of the United States. In spite of rumbles from the “war hawks,” however, America officially remained neutral during this war. A *neutral* country is one which doesn’t take either side. The United States wanted to trade with both countries. But Britain thought that American food, timber, and other goods would help France to win the war. Britain wanted to stop American ships from going to France.

Some British sailors had deserted from the British navy. British ships began stopping American ships and searching them. If any British deserters were found they were taken off the ship.

The Americans did not like having their ships boarded and searched by the British. They didn’t like having their trade with France stopped by Britain. Britain and the United States began to be unfriendly towards each other again.

**A problem was growing between the United States and Canada as well.** Many American settlers were pushing westward into the Ohio Valley. They were settling on land that Britain had promised would be kept for the Indians. The Indians didn’t want to lose their hunting lands. They banded together and tried to keep the Americans out of the Ohio Valley. They bought guns and ammunition from Canadian traders. This made the Americans think that Canadians were trying to stir up trouble.

There were some Americans who believed that the whole continent should belong to their country.

This policy was called *manifest destiny*. They wanted the United States to take over Canada. Their country would then be the largest and strongest nation in the world. These Americans felt that they could attack Canada while Britain was busy fighting France. British forces wouldn’t be able to come to help Canada. In 1812 the United States declared war on Britain.

**The United States was in a strong position to conquer Canada.** There was a long, undefended border between the two countries. British North America had only five hundred thousand people. They lived in a thin line of settlement along the border. The population of the United States was over seven million.

Canada was not prepared for a war. There were only five thousand British troops to help defend Canada. The United States could quickly build a huge army. The Canadians had only a small number of ships on the Great Lakes. The Americans had many.

The Americans believed that the victory would be easy. They knew that many thousands of Americans had recently settled in Upper Canada. They had moved there for cheap land, not because they were loyal to Britain. The Americans believed that these settlers would welcome an invading army from the south.

## The Battles Begin

**The War of 1812 was fought in three areas.** British and American ships fought along the Atlantic seaboard. The two armies battled in the St. Lawrence Valley and the Niagara peninsula. The two naval forces met on the Great Lakes.

Britain had the largest and most powerful fleet of ships in the world. Hundreds of those ships prevented Americans from moving in or out of the harbors. There were many fights between individual ships, however, and sometimes American ships won those battles.

The governments of Nova Scotia and the United States allowed private ship owners to arm their vessels. The men who operated these ships were called





*The American ship "Chesapeake" (left) surrenders to the British "Shannon" (right).*

privateers. Nova Scotian privateers captured more than two hundred American merchant ships. American privateers captured over one thousand British and Canadian vessels. In spite of this, the British succeeded in choking off American sea trade by 1814.

**British and Canadian forces combined to fight off American invasions by land.** British troops, led by General Sir Isaac Brock, had an important victory early in the war. A small force of soldiers, accompanied by Indians and traders, captured Fort Michilimackinac. This fort lay between Lake Michigan and Lake Huron. This assured British control of the upper Lakes during the war. The Americans couldn't attack from the west.

**There were three invasion routes left for the Americans.** They could invade from Detroit, or from Niagara. They could also invade from Lake Champlain and the St. Lawrence River.

General Brock captured Detroit in 1812. Even though the Americans recaptured it in 1813, there were no further attacks from Detroit.

The major battle in the Niagara Peninsula was fought at Queenston Heights in 1812. General

Brock was in command of about fifteen hundred British soldiers. He met an American army of six thousand which tried to cross the Niagara River. General Brock, an outstanding leader, was killed in the battle, but his handful of men halted the invasion.

The battles of Detroit and Queenston were decisive battles. They stopped the Americans from winning the war soon after it had begun. The Canadians were not as ready to give in as the Americans had thought. The victories also boosted Canadian and British morale.

**The war continued for another two years.** The Canadian, British, and Indian forces won several victories. Lundy's Lane, Stoney Creek, and Crysler's Farm were important ones. The Americans won some battles too. In 1813, they captured and burned York. York was the old name for Toronto. In 1814, however, the British forces marched into Washington. Several important buildings, including the White House, were burned.

Along the St. Lawrence River and Lake Champlain the Americans met defeat and disappointment. In 1812, they tried to capture Montreal. They





*General Sir Isaac Brock was killed during the Battle of Queenston Heights in 1812.*

turned back after meeting British and French Canadian forces under Lieutenant Colonel Charles de Salaberry. Later de Salaberry's regiment turned back a large force of Americans at Chateauguy.

**American ships controlled the Great Lakes.** Early in the war, the Americans built a fleet of nine vessels on Lake Erie. They were able to hold the lakes throughout the war. They could ferry men and supplies across the lakes into Canada.

### **The War Ends**

In 1814, Britain defeated France in Europe. About eighteen thousand experienced British troops were free to come to Canada. The Americans no longer had any hope of conquering Canada. Peace talks between the two sides were begun at Ghent in Belgium.

**There were two principal reasons behind the successful defence of Canada.** First, the people were loyal to the British Crown. In Lower Canada, the French Canadians did not sympathize with the American support of France. In Upper Canada, recent immigrants remained loyal to Canada. They

did not side with the Americans. The populations in both of the Canadas were united in their defence of British North America.

Second, the British forces in Canada had strong leadership. They were also very well trained. Along with the Canadian militia, they had high morale. These troops were defending their own land against attack. This made them more determined to win than the Americans were.

**There were three main reasons for the Americans' failure to take Canada.** At the beginning of the war, they had few outstanding leaders. Some generals who had fought in the Revolutionary War were brought out of retirement. The result was that American soldiers were often undrilled and disobedient. Many refused to fight beyond their own states.

Second, the Americans made a mistake in their plan of attack. It would have been easy for them to strike a heavy blow at Montreal. This would have cut off supplies to Upper Canada. Instead, the Americans chose to fight with a number of smaller armies. They fought along three different routes.





American ships attack York (now Toronto).



In 1813 Lieutenant Colonel Charles de Salaberry's regiment defended Montreal against the Americans. Why are some of these men not wearing uniforms?





*Battles of the War of 1812.*

This made them much less effective.

Finally, there was disagreement over the war within the United States. Most of the opposition had come from New England. Even when the war began, these states refused to supply money or troops. There was not much patriotic feeling for the war in the United States.

### **The Treaty of Ghent**

The war was ended by the **Treaty of Ghent**. The treaty did not deal with any of the matters which caused the war in the first place. The war with France was over, so American trade with France and the stopping of American ships was no longer important to Britain. Britain no longer wanted to look after the interests of the Indians in the Ohio Valley. The Americans had found that conquering Canada would not be easy.

It was agreed in the Treaty of Ghent that the land taken during the war would be given back. The boundary was to be the same as it had been before the war. But the western boundary was to be settled by a commission with members from both countries.

In 1818, the commission extended the boundary westward. From the Lake of the Woods, it followed the forty-ninth parallel to the Rocky Mountains. The Oregon region was to be held jointly by both countries. This arrangement lasted for a number of years.

The most important agreement in the Treaty concerned disarmament. *Disarmament* means that countries agree to limit the number of weapons they have. At the end of the war, both sides had armed ships on the Great Lakes. Both countries agreed to limit the number of their ships. Each ship was to have only one gun. This measure kept peace on the Great Lakes.

**The war had very important effects on the United States and Canada.** The United States had been unable to bring in goods from other countries during the war. This meant that Americans had to learn how to do many more things for themselves. The war made the United States a more independent country.

Their ships and armies had had some important victories. This gave the Americans a new sense of



pride in their leaders, and confidence in themselves. As a result of the war, people felt less attached to their states and more loyal to their country.

The war had a similar effect on British North America. During the American Revolution, the French Canadians had neither encouraged nor discouraged Americans when they invaded Quebec. This time they had vigorously defended their homeland against attack.

In Upper Canada, there had been a long struggle against American invasion. Winning the struggle made the people there feel proud, too. They had successfully defended their land against a very powerful neighbor. All of the people in British North America were thankful for the protection given by Britain. They wanted to remain loyal to the Crown.

This was the last time that Canadians and Americans went to war against each other. Relations between the two would become very strained during the American Civil War, but the settlements reached after the War of 1812 set a pattern. Our countries could resolve differences peacefully. That pattern has been followed ever since.

## Using What You Know

1. What part did each of these people play in the War of 1812?  
Charles de Salaberry      Sir Isaac Brock  
Tecumseh      Napoleon Bonaparte  
President Madison      Laura Secord
2. Choose one member of the class to be President Madison. The rest of the class will be his Cabinet. Discuss your motives and plans for the invasion of Canada.

## Working with Key Facts

Below is a list of important events. On paper, write the numbers 1 through 7 in a column. Beside the numbers write the letters showing the correct order of the events.

- A) British ships stop American ships from going to France
- B) Sir Isaac Brock dies in battle
- C) The United States and Britain sign the Treaty of Ghent
- D) The British capture Fort Michilimackinac
- E) The Americans burn York
- F) Britain and the United States agree on the forty-ninth parallel boundary
- G) The United States declares war on Britain

## Using Key Ideas

1. How can you explain the great difference between the size of the populations of British North America and the United States?
2. What do you think might have happened in British North America if the Americans had succeeded in their invasion?

## Fun with Maps

1. On a map of North America, draw arrows to show the three routes by which the Americans tried to march into Canada.
2. Color those Great Lakes on which naval battles were fought during the war.

# The American Civil War and Canadian Confederation

In 1861 civil war flared in the United States. In a *civil war* both sides are from the same country.

Eleven Southern states had withdrawn from the United States. They set up a government called the Confederate States of America. Jefferson Davis was elected as the President of the Confederacy. The states that remained loyal to the United States were called the Union. Abraham Lincoln was the President of this divided United States.

## Slavery as a Cause of War

Cotton was grown on large plantations in the South. It was the main crop. Many workers were needed on these huge plantations. The workers that were used were not free. They were slaves. In the early 1800s a machine, the cotton gin, was invented. The cotton gin made it easier to prepare

cotton for the mills. This meant that even more cotton could be grown. As a result, even more slaves were needed.

Plantation slaves worked sixteen hours a day, six days a week. They could not leave the plantation without the owner's permission. They could not visit with friends or have church services without a white person there. They could not go to school. An owner could hurt a slave without being punished. An owner could sell a slave's children or separate a family at any time. Slaves had no choice about where they would live and work.

There were three ways that slaves could become free. They could escape, be freed by an owner, or buy their freedom. Otherwise they were slaves for life.

The North did not need slaves. They had laws against slavery. The North had other industries







*The Underground Railroad helped slaves to escape to the North. Why do you think it was called the Underground Railroad?*

besides farming. Some people were in the lumber, fishing, and ship building businesses. Farming was almost the only industry in the South.

Many people opposed slavery. They worked to abolish, or do away with, slavery. They were called *abolitionists*. A few abolitionists had been former slaves themselves. Three famous Black abolitionists were Sojourner Truth, Frederick Douglass, and Harriet Tubman.

A system of secret escape routes for runaway slaves was set up. This was called the *Underground Railroad*. Some of the routes led to Canada where slavery had been abolished much earlier.

### **The Quarrel Over Slavery**

**The American territories in the west were being settled.** They wanted to become states. The problem

was, would these new states be *slave-holding* states or *free states*? A free state did not allow slavery.

People in the North wanted slavery forbidden in new states. People in the South wanted new states to decide about slavery for themselves.

**In 1850, a compromise plan was worked out.** In a *compromise* each side gives up part of what it wants. Each side also gets part of what it wants. The compromise worked for a few years. But the North and the South were still angry with each other.

**In 1860 Abraham Lincoln was elected President of the United States.** He wanted all new states to be free states. The South knew this. Some Southerners said that if Lincoln became President their states would leave the United States.

A few Southern states had been wanting to leave the United States. They thought that a state had the right to do this if there was a good reason. They thought a citizen should be loyal first to the state and then to the nation. Northerners felt that a citizen's first loyalty should be to the nation.





*After 1863, many Blacks enlisted in the Union Army. This picture was part of an advertisement to recruit Blacks. Why was it only after 1863 that Blacks were allowed to enlist?*

In 1861 Lincoln took office. Some Southern states began to leave the Union. At this time the North had a population of twenty-two million. The South's population was only nine million. Four million of these were slaves.

In the Confederacy the Civil War was called the War for Southern Independence. Southern soldiers fired the first shots of the war at Fort Sumter, in South Carolina. It went on for four bitter years. It was a tragic war with many casualties on both sides.

On January 1, 1863, President Lincoln signed the Emancipation Proclamation. This freed the slaves still in the South. It also gave Blacks in the North the right to serve in the Union Army as soldiers instead of cooks, drivers and laborers.

**A key battle was fought near Gettysburg, in Pennsylvania.** It lasted three days in July 1863. Over fifty thousand soldiers were killed. The North won the battle and drove the Confederate troops back. This was a turning point of the war. Later that year

the site was turned into a memorial. At its dedication, President Lincoln gave a famous speech known as the Gettysburg Address.

The terrible war ended in April 1865. General Robert E. Lee surrendered his Confederate forces to General Ulysses S. Grant at Appomattox Court-house, Virginia.

### **How the Civil War Affected Canada**

**During the American Civil War the British did not stop buying cotton from the South.** They remained neutral on the question of slavery: the South's raw cotton was important to industrial England.

The British supplied ships to the South, which were used as warships. The British became very angry with the North when British ships were boarded by the Union navy. Confederate agents on board were taken off. Not since the War of 1812 had relations between Britain and the United States been so strained.

Canada was caught in this tension between Britain and the United States. Canadians were sym-





*On April 9, 1865, General Robert E. Lee (right) surrendered to General Ulysses S. Grant (left) at Appomattox Courthouse.*

pathetic to the anti-slavery North. But Canada was still a British colony. Canadians began to worry that the Americans would invade Canada.

Matters became worse in October 1864. Some Confederate soldiers, using Canada as their base, raided St. Alban's, Vermont. They escaped back into Canada just 15 km to the north. The United States was very angry and wanted to invade Canada then and there.

The United States decided not to renew the Reciprocity Treaty of 1854. This Treaty allowed Canada to sell natural products in the United States without a tax being added. Now natural Canadian products would cost a lot more in the United States.

The loss of the Reciprocity Treaty forced the British North American colonies to look elsewhere for trade. For such a long time it had been easier to trade north-south. Now the colonies began to consider east-west trade between themselves. They soon realized the value an Inter-colonial railroad would have in setting up these new avenues of trade.

Some people in the Canadas began to talk about joining the colonies together. A single country would be better able to defend itself from invasion by the Americans.

### **The Confederation Conference**

**All the colonial leaders met in Prince Edward Island in 1864.** This was the Charlottetown Conference. At this meeting they discussed trade, defence, and the railroad. They considered uniting



*In 1864, delegates from the Canadas arrived in Charlottetown, Prince Edward Island. Only one man rowed*

*out to meet them because another event was taking place in Charlottetown. Find out what it was.*

all the provinces into one country. The Atlantic provinces didn't want to join.

The leaders of the Canadas promised that a trans-continental railroad would be built. This would make trade between the provinces easier.

The leaders decided to meet again later that year in Quebec City.

At the Quebec City meeting they discussed a Constitution for Canada. Sir John A. Macdonald attended from Upper Canada. Sir George Etienne Cartier came from Lower Canada. Sir Leonard Tilley came from New Brunswick and Sir Charles Tupper from Nova Scotia. These men became known as the Fathers of Confederation.

The Fathers of Confederation saw problems in the American system of government. They wanted to avoid these problems. They thought that the American system had given too much power to the individual states. This had allowed the Southern states to leave the Union. They didn't want this to happen in Canada.

They wanted a strong central government. The central government would be responsible for everything concerning all of the provinces. This would include defence, banks, postal service, inter-provincial railroads, and international affairs.

The provincial governments would be responsible for things such as education, roadbuilding, and railroads within the province. Those areas not yet settled by discussion would remain in the control of the central government.

The American Civil War had been a good lesson for the people of Canada.

**In 1866, Canada was again threatened with invasion.** In the United States a group called the Fenian Brotherhood was formed. It wanted to take over British North America.

The Fenians were Irish-Americans. They wanted to trade Canada for Ireland's freedom from Britain. Many Fenians had been Union soldiers. They were well trained.

The militia were called up in New Brunswick in



case the Fenians attacked. In the end only five Fenians made a quick raid across the border. There had been rumors that three or four thousand would attack. Later they tried to invade Canada East and Canada West.

Nova Scotia and New Brunswick had been uncertain about joining Confederation. The Fenian threat convinced them it was a good idea. Both provinces decided to support Confederation.

The delegates met again in 1866 in London, England. The result of this conference was the British North America Act. It was declared that the union of Quebec, Ontario, New Brunswick, and Nova Scotia would take place on July 1, 1867. On that day Canada was officially born.

## Other Provinces Join Canada

Sir John A. Macdonald was the new nation's **first Prime Minister**. He knew that communication with British Columbia was very difficult. It would be necessary to build a transcontinental railroad to connect the east and west. A railroad would open up the vast prairie lands to settlers before the Americans became interested in them. It would also make British Columbia feel like the western part of the nation.

First, Rupert's Land would have to be turned over to the Canadian government. This happened in 1869. The next year, the tiny province of Manitoba was born.

In 1871, British Columbia agreed to join Confederation. The central government promised British Columbia that a railroad would connect it to the east. At the same time, the government realised that the Native People were not being fairly treated by white traders. As a result, the North-West Mounted Police was formed in 1874. The creation of the NWMP also showed American settlers that Canadian law and order existed on the Prairies. The threat of American annexation disappeared.

Prince Edward Island joined in 1873. It would be 1905 before the populations of Alberta and Saskatchewan were big enough for them to become provinces. Newfoundland was the last province to enter in 1949.

The transcontinental railroad promised to British Columbia in 1871 was not completed until 1885. The railway, and the security offered by the "Moun-

ties,” brought many settlers to the West. The Canadian government and the Canadian Pacific Railway both advertised for colonists to come to Canada’s “Golden Northwest,” and to Manitoba’s “Boundless Wheatfields.” New settlers poured into the West. Their arrival ended the fears of being taken over by the Americans.

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*The Canadian Government and the Canadian Pacific Railway advertised around the world for colonists. Would this poster have encouraged you to immigrate to Canada?*

## *In Focus*

### THE GOVERNMENTS OF CANADA AND THE UNITED STATES

The purpose of a government is to make laws that serve and protect its people.

The governments of Canada and the United States are similar in many ways. Both are federal forms of government. A *federal* government has two levels of rule. The *national* level looks after matters that affect the whole nation. Canada's national government is in Ottawa; America's is in Washington, D.C. Next is the *provincial* level in Canada and the *state* level in the United States.

These take care of matters relating to the province or state. Together the national and provincial or state governments share in the rule of the country.

The national governments of the two countries have similar parts. Each has a *head of state* who leads the government. In Canada, the head of state is the King or Queen, represented by the Governor General. However, the Queen does not interfere with Canada's government. The real leader is the Prime Minister. In the United States the head of state is the President.

The laws in both countries are made by elected representatives. In Canada, the representatives are in Parliament. *Parliament* is made up of the House of Commons and the Senate. In the United States, the representatives are in *Congress*, which is made up of the House of Representatives and the Senate.

Another similarity is that both countries have a *party* system of government. A political party is a group of people who have a program, or plan of action, for governing the country. Each party feels that its program is the best one. In elections, each party works hard to win most votes from the people. The party which wins most votes wins the most seats, or the *majority*, in the elected House. This means that it will have the most influence over what laws are made.

In Canada, the political party that gains the most seats in the House of Commons becomes the governing party. The Prime Minister and the Cabinet are members of that party. In the United States this is not so. The President is elected in a separate Presidential election. He or she appoints officials to the Cabinet who are not elected representatives. The President and the Cabinet may, therefore, belong to a political party different from the one that holds the most seats in the House of Representatives.

Each country's Senate is formed in a different way. In Canada, Senators are recommended by the Prime Minister and appointed by the Governor General. They are not elected. In the United States, Senators are elected by the people.

#### USING KEY SKILLS

1. Collect articles dealing with government decisions from your daily newspaper. Classify the articles according to whether they discuss decisions of the federal government, the provincial government, or the municipal (local) government. What are the duties of each of these governments?
2. Follow the passage of a bill through the Canadian Parliament. Contrast this process with the passage of a bill through the American Congress.
3. Try to contact a class in an American school. Exchange information on your governments.
4. Look up the meaning of the word *constitution*. How is it applied to governments? Find out whether Canada and the United States have similar or different constitutions.
5. In an encyclopedia read about one Canadian Prime Minister and one American President. Find out how they came to be chosen.



### Using What You Know

1. Compare relations between the United States and Britain
  - A) before the War of 1812
  - B) during the Civil War.
2. Pretend you are a reporter for an Abolitionist newspaper. Write an article that describes the evils of slavery.

### Working with Key Facts

Rewrite on paper this list of provinces in the order in which they entered Confederation. Include the date each entered.

Alberta	Quebec
British Columbia	Prince Edward Island
Ontario	New Brunswick
Newfoundland	Saskatchewan
Manitoba	Nova Scotia

### Using Key Ideas

1. Do you think the Fathers of Confederation were wise in not copying the American system of federal government exactly?
2. Why do you think Canada's West took much longer to settle than did the American West?
3. How do you think Canadians are different from Americans? How are they the same?
4. What do you think might have happened if the South had won the American Civil War?

### Fun with Maps

1. On an outline map of the eastern United States
  - A) shade in the states that remained in the Union in blue.
  - B) shade in the Confederate States in grey.
2. Using the information given in an Historical Atlas, draw the following on four separate outline maps of Canada.
  - A) the shape of the provinces in 1867
  - B) the shape of the provinces in 1873
  - C) the shape of the provinces in 1905
  - D) the shape of the provinces today

# Settlement of the West in the United States and Canada

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**Most of the people of the new country called the United States of America lived and farmed along the Atlantic coast.** Travelling up and down the coast was easier than travelling inland. It would take two weeks to travel by road from New York to southern Georgia—1600 km. But it would take two weeks to travel from New York inland to Ohio—only 700 km. Going over the ridges and through the valleys of the Appalachians was slow, hard work.

It was not long before the best land along the coast was taken. This forced people to move further inland in search of good farm land. The land west of the frontier was called the Indian Country. It was the home of the Native Peoples. Many white people thought that the Indian Country was unclaimed and free for them to settle in.

**Hunters and trappers were the first frontier explorers to cross into the Indian Country.** At first these men went in search of furs and wild game. They learned much from the Native Peoples they met there. They found trails and gaps through the mountains. They found the best places to cross rivers. When these explorers returned home they told other people how fertile the soil was. Soon many settlers were moving into the Indian Country.

**There were three main routes into the new frontier.** From Virginia people could pass through the Appalachians at Cumberland Gap. People from New York could follow the Hudson and Mohawk rivers. This route led through the mountains to the land near Lake Ontario and Lake Erie. People from the mid-Atlantic states could go west across Pennsylvania to Pittsburgh. From Pittsburgh it was easy to float along the Ohio River to the western lands. Pittsburgh was called the gateway to the Ohio Valley. The Indian Country was in the Ohio Valley.

By 1803 so many settlers had moved into the Ohio Valley that Ohio became a state. The United States' government had sold millions of hectares of Ohio land to land companies. These companies sold it to the thousands of pioneers who were settling in the area.

Settlers came to the Ohio Valley in covered

wagons called Conestoga wagons. These were painted in bright colors and had white canvas tops. They were pulled by teams of oxen or horses. Supplies for the trip and everything needed to start a new home were carried in the wagons.

The settlers chopped down forests and laid out farms. This angered many of the Indians living in the area. The wild game was driven away and it became harder for them to hunt. Their land was being destroyed. They began to raid the boats and wagons bringing settlers. Soldiers were sent into the area and the Indians were pushed further and further west. They were forced away from their traditional homelands. Many Indians caught diseases from the settlers. They died of measles, whooping cough, or small pox.

The Indians who survived the battles and diseases had to change their traditional way of life completely. They had to learn how to live in the white man's world.

## The Louisiana Purchase

**In 1803 the United States bought the Louisiana Territory from France for \$15 million.** This territory stretched west to the Rocky Mountains.

**To the north of the Louisiana Purchase lay a huge area called Rupert's Land.** Rupert's Land was controlled by the Hudson's Bay Company. This fur company had its head office in England. Many of the men who worked for the company were trappers and explorers. Three of the more famous were Henry Kelsey, Anthony Henday, and Samuel Hearne.

The Louisiana Purchase nearly doubled the size of the United States. Settlers, hunters, and trappers were pleased with the deal, but some people who lived in the east thought that a lot of money had been wasted on useless wilderness.

The French explorer Pierre de la Vérendrye had travelled the northern part of the Louisiana Purchase in the 1690s. Ten years earlier Robert Cavelier Sieur de La Salle and his men had travelled down the Mississippi River. Even so, the area was still quite unknown by 1803. A few trappers and hunters had







*Conestoga wagons were built to haul freight over bad roads. Curved wagon beds kept the contents from moving. Why do you think these wagons had broad wheels?*

travelled into the area. They had returned with amazing stories of vast grassy plains and herds of buffalo. The American government decided that the area had to be thoroughly explored.

### **The Lewis and Clark Expedition**

President Thomas Jefferson asked Captain Meriweather Lewis and Lieutenant William Clark to explore the new territory. They were to travel up the Missouri River and other rivers. They hoped to find a water route to the Pacific Ocean. In May 1804 Lewis and Clark left from St. Louis.

During their explorations they were told by the Mandan Indians of the "Everywhere Salt Water." They knew this would be the Pacific Ocean. One of their guides was a Shoshoni woman named Sacajawea. She carried her baby with her on the expedition. Sacajawea was very valuable to the explorers. Without her help, it is not likely that the journey would have been successful.

Sacajawea led Lewis and Clark to her people, the Shoshoni. The Shoshoni gave them horses, supplies, and guides to cross the mountains.

Once over the mountains, they were able to paddle down the Snake River to the Columbia River. They followed the Columbia and at last they reached the Pacific Ocean. They stayed there over the winter and then returned home. They had been gone for nearly two and a half years and had travelled about 13 000 km.

**The land they had reached was called the Oregon Country.** It contained much fertile land and offered a good fur trade. It stretched north from California to Alaska and extended inland from the Pacific for about 1300 km.

By the 1830s settlers were moving into the Oregon Country. This move would later help the United States government to lay claim to all of the Oregon Country.

**However, the British and the Hudson's Bay**





### Louisiana Purchase

0 kilometres 550



States  
in 1803



U.S. Territories  
in 1803

Continental  
Divide



## Lewis and Clark and Pike explore the West

Company had a strong claim to this land also. The coast had been visited by Sir Francis Drake in 1589, by Captain Cook in 1778, and by Captain Vancouver in 1792. Men from the Hudson's Bay and North West fur companies had also travelled in the Oregon Country. In 1793 Alexander Mackenzie had been the first white man to cross the continent by an overland route. Simon Fraser had discovered the river named after him in 1808. It flowed westward through the mountains to the coast. David Thompson had bought the fort at the mouth of the Columbia River from an American businessman. He changed its name from Astoria to Fort George.

Neither country was willing to give up its claim to the Oregon country. Some Americans wanted to

settle the dispute by going to war with Britain. Others wanted to talk things over at a conference. Finally, in 1846, the United States and Britain decided to divide the Oregon Country. Britain would have the land north of what is now Canada's border. The United States would have the southern part. Settlers coming to British Columbia now had to arrive by boat after rounding Cape Horn. American settlers could use the Oregon Trail.

### The Oregon Trail

The Oregon Trail began at Independence, Missouri. Each May groups of forty-five or fifty wagons would leave Independence. Flour, sugar, smoked meats, coffee, salt, and dried fruits were basic





*Sacajawea helped guide the Lewis and Clark expedition.*

supplies required for the trip. Shoes and boots, seed potatoes, spare wheels, wagon parts, and ammunition were packed into each wagon. Space also had to be found for the household utensils, beds, blankets, and dishes. Apart from the horses and oxen that pulled the wagons, cattle and sheep were brought along. The Trail wound northwest for about 3200 km. It took five months to travel.

Wagon trains often hired a guide. Guides knew the best and easiest routes to follow. Each wagon train chose a captain or leader. When the wagons reached the Columbia River, they were loaded onto rafts. They floated down the Columbia River and into the Willamette Valley. This was the journey's end.

### **The Red River Settlement**

**There were no trails for Canadian settlers.** In fact, there had only been one attempt to settle in the west.

In 1812, settlers had been brought from Scotland by Lord Selkirk. Lord Selkirk was one of the owners of the Hudson's Bay Company. The company had given him a grant of land. He decided to start a colony on that land. It would be the first colony west of Upper Canada and north of the Canadian-American border.

The colony was at the junction of the Red and Assiniboine rivers. The North West Fur Company, who were rivals to the Hudson's Bay Company, did not want settlers in the west. Neither did the Métis.





*The inside of a Conestoga wagon.*



*Traders and trappers were often hired as guides for wagon trains. What skills would they have had that made them good guides?*

The Métis were descended from European fur traders and their Indian wives. They felt that the land around Red River belonged to them. The Métis and the North West Company tried to chase the settlers away.

After 1821, former fur traders and their families began to settle at Red River. They were Hudson's Bay and North West company men who had lived all over the northwest. Because of this the settlers at Red River knew much about the Indian way of life. This helped the little settlement to survive.

### **The Southwest is Explored**

The Southwest was explored in 1806 by Zebulon Pike. He was sent by the American army to explore and find the source of the Arkansas and Red rivers. (There is a Red River in Texas as well as one in Manitoba.) This was the southern part of the Louisiana Purchase. In trying to track down the source of the Red River, Pike crossed into Spanish territory. The Spanish had held this land since before the Pilgrims had landed in America.

When Pike returned home traders were eager to listen to his report. They learned that the people in the Spanish territory wanted to trade. This was only possible after 1821 when Mexico won its freedom from Spain.

**The southwest traders followed the Santa Fe Trail from Missouri.** Part of the route crossed a stretch of hot, dry, sun-baked desert.

Soon, thousands of people from the United States were settling in Texas. Texas was ruled by Mexico. These settlers did not want to be governed by Mexico. They wanted to be part of the United States.

Fighting broke out between Texan and Mexican troops in 1835. An important battle was fought at the Alamo. Over 5000 Mexicans were resisted by 187 Texans. Texans swore they would not give up while any of them still lived. They held out for twelve days. Among those who died at the Alamo were Davey Crockett and Jim Bowie, the inventor of the Bowie knife. The Alamo became a symbol of the determination of the Texans to separate from Mexico. The Texans formed an army and its slogan was "Remember the Alamo." This army fought the Mexicans until it won freedom for Texas.

**Texas was an independent nation for nine years.**





*The Red River Settlement was at the junction of the Assiniboine and Red rivers. This picture of winter activities was painted by a boy who lived at Red River in 1821.*

In 1845 it became a state. The next year, the United States went to war with Mexico. They wanted control of New Mexico and California. Mexico was defeated in 1848.

A small piece of land was purchased from the Mexicans in 1853. It was called the Gadsden Purchase. With this last purchase the United States outline was as it appears today.

### **Gold Brings Settlers**

**In 1848 gold was discovered in California.** Within one year thousands of gold hunters were heading west. By 1850 there were so many people in California that it was admitted as a state.

Fortune hunters had another chance when gold was discovered in British Columbia in 1856. There was another discovery in the Cariboo District in 1859. These gold strikes brought people north from California. They also brought the Overlanders. These were the first pioneers to cross Canada by

wagon train. The trip was very difficult. Many died in the Fraser Canyon and on the Thompson River.

By the mid-nineteenth century there was a telegraph line from coast to coast in the United States. Now messages could travel quickly "by wire" over distances that pony express riders had taken days to cover. Railroads were becoming the chief means of transportation. The eastern United States and eastern Canada had railroad service.

By 1869 the United States had a transcontinental railroad. Spurred by Confederation, a railroad was built across Canada by 1885. The railroads made it easier for people to reach the west. They also made the transport of goods and crops easier. In both countries the railroads were the final step in western expansion.



Red River carts cross the Canadian prairie in 1877.







**Routes to the Far West**

0 kilometres 350

Continental Trails/Routes  
Divide

■ Forts    ● Towns

## Using What You Know

1. Choose an American and a Canadian explorer from the lists below. Explain why they are remembered.

### American

Zebulon Pike

Meriweather Lewis

William Clark

### Canadian

David Thompson

Robert Cavelier de La Salle

Pierre de la Vérendrye

2. Pretend you are leaving for the California gold fields in the Gold Rush of 1849. Write a letter to a friend trying to convince him/her to join you.

## Working with Key Facts

1. Write the numbers 1 through 6 in a column. Beside each number write the letters showing the correct order of events.
  - A) The Oregon Country is settled
  - B) The Gadsden Purchase
  - C) The Ohio Valley is settled
  - D) Texas becomes a state
  - E) The Louisiana Purchase
  - F) California and the Southwest are secured

## Using Key Ideas

1. What might have happened if the French government had not sold Louisiana to the United States?
2. What do you think might have happened if the Hudson's Bay Company had not controlled Rupert's Land?
3. A white surveyor wrote in his journal, "My God, what a terrible tale I could tell of the dark deeds done by the white savage against the far nobler red man." What do you think he meant?

## Fun with maps

1. Using an atlas and tracing paper do the following:
  - A) Draw the outline of North America in black.
  - B) Draw in the Continental Divide in brown.
  - C) Draw a red line around the area drained by all the rivers that flow into Hudson Bay and James Bay. This was Rupert's Land.
  - D) Draw a green line around the area drained by all the tributaries of the Mississippi River that flow in from the west. This was the Louisiana Purchase.

2. On an outline map of the United States indicate the following:
  - A) The locations of St. Louis, Independence, Los Angeles, San Francisco, Santa Fe, New Orleans, Pittsburgh, and New York.
  - B) Using different colors for each, indicate the Oregon Trail, the California Trail, the Santa Fe Trail, and the Old Spanish Trail into southern California.
3. Using the map on page 113 entitled "Louisiana Purchase," complete this exercise.
  - A) On the map find the Continental Divide. In your notebook, draw the kind of line, or symbol, used to show the Continental Divide.
  - B) On the map find a river. In your notebook, copy from below the symbol that shows a river.



- C) Find New Orleans on the map. What symbol is shown beside its name? Draw it in your notebook.
- D) Find the Spanish lands on the map. Draw the kind of line, or symbol, used to show the borders of these Spanish lands. The line you have just drawn is the symbol used on this map to show the *boundary line* between two countries. What country owned the Louisiana Territory after 1803?



# Geography Glossary

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**altitude** The height above sea level.

**bay** Part of a large body of water that reaches into the land.

**branch** A river that flows into a larger river. Also known as a tributary.

**canyon** A deep, narrow valley with high, steep sides.

**cliff** A high, steep wall of rock.

**climate** The kind of weather a place has year after year.

**continents** The seven largest bodies of land on the earth.

**current** The flow of a stream of water.

**delta** Land built up of soil deposited at the mouth of a river.

**divide** A high ridge of land between two regions that drains different river systems.

**downstream** The direction in which a river flows.

**elevation** The height above sea level.

**equator** An imaginary line around the earth halfway between the North Pole and South Pole.

**falls** A fall of water from a high level to a lower level. Also a waterfall.

**fiord** A long, narrow arm of the sea that reaches inland and usually has steep sides.

**glacier** A large body of ice that moves slowly over land.

**globe** A small model of the earth that usually has a map of the world on it.

**growing season** The number of days when the weather is warm enough for crops to grow without damage from frost.

**gulf** Part of a large body of water that reaches into the land; larger than a bay.

**harbor** A sheltered body of water where ships may anchor safely.

**hemisphere** Any half of the earth's surface.

**hill** A raised and somewhat rounded part of the earth's surface; smaller than a mountain.

**iceberg** A floating mass of ice that has broken from a glacier.

**island** Land entirely surrounded by water; smaller than a continent.

**isthmus** A narrow strip of land that connects two larger bodies of land.

**jungle** Land thickly covered with bushes, vines, and

trees, found predominantly in the tropics.

**lake** An inland body of water.

**latitude** Imaginary lines running east and west but measured in degrees north and south of the equator.

**longitude** Imaginary lines running north and south but measured in degrees east and west of the Prime Meridian.

**mountain** High rocky land with rather steep sides and with a sharp, pointed peak or a rounded top; higher than a hill.

**mountain range** A long row of mountains.

**mouth (of a river)** The place where a river empties into a larger body of water (lake, sea, or ocean).

**North Pole** The point on the earth that is farthest north.

**oceans** The earth's five largest bodies of water.

**peninsula** The part of a larger body of land that is almost surrounded by water.

**plateau** A region of high land that is not as level as a plain.

**prairie** A large area of level or rolling grassland.

**river basin** The land drained by a river and its branches.

**river valley** Low land through which a river flows.

**sea** A large body of salt water, smaller than an ocean, partially or entirely enclosed by land.

**sea level** Level with the surface of the sea.

**season** A part of the year when the weather from day to day is somewhat alike. Winter is a season.

**sound** A long, narrow body of water that separates one or more islands from a mainland.

**source (of a river)** The place where a river begins.

**South Pole** The point on the earth that is located farthest south.

**strait** A narrow body of water that connects two larger bodies of water.

**tide** The regular rise and fall of ocean water that occurs about every twelve hours.

**timber line** The place on a mountain above which trees cannot grow because of the severe climate.

**tundra** Vast, barren, treeless plains in the cold arctic and alpine regions.

**volcano** A mountain with an opening through which steam, ashes, and lava are forced.

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